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STATUS OF THE WHITE-TAILED KITE IN NORTHERN AND CENTRAL FLORIDA

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Abstract.—The White-tailed Kite (*Elanus leucurus*) historically was a rare breeding resident of central Florida, but it nearly became extirpated by the mid-20th century. Kite reports in the state have been increasing since the 1960s. Most reports from 1961 to 1972 occurred in the central peninsula. From 1973 to 1990, however, most kite sightings and all 13 nests were found in the eastern Everglades in south Florida. Since 1991, reports of White-tailed Kites, mostly from central Florida, have increased further. In 1996 kites resumed nesting in the region after a 66-year absence. The possibility of kites expanding their nesting range into northern Florida is discussed.

Eisenmann (1971), Pruett-Jones et al. (1980), Gatz et al. (1988), and Dunk (1995) documented the dramatic decline and subsequent recovery of the White-tailed Kite (*Elanus leucurus*) throughout its range. Titian Peale added the species to the Florida list when he collected a specimen near St. Augustine in 1824 or 1825 (Curnutt and Hoffman 1992). Howell (1932:163) called the kite “a rare and local resident” that seemed “on the verge of extinction” in the state. Kites continued to be reported sporadically through the 1950s (Sprunt 1954, 1963), but the last nesting record until recently was in 1930 (Stevenson and Anderson 1994). Kale (1974) summarized most Florida reports of White-tailed Kites up through 1972 and documented their increase since 1961.

In September and October 1984, at least one adult White-tailed Kite was observed on Weston Road in eastern Broward County (Atherton and Atherton 1985). On 30 September 1984, a juvenile was seen along the same road (D. Goodwin, L. Snyder, and B. Pranty *in* Powell 1986), so breeding may have occurred in the area that year (Pranty 1992). In 1986, King (1987) documented the kite’s return as a breeding species when he found three nests in the Everglades in Broward County. Curnutt (1989) described a kite nest found in Everglades National Park in Dade County in 1988. Curnutt and Hoffman (1992) noted an increase in White-tailed Kite sightings in south Florida from 1973 to 1990, especially during 1989-1990. In October and November 1990, a communal roost of 14 kites was found west of Homestead in Dade County (Cox 1991). In this paper, we document a continued increase in kite sightings from 1991 to 1996, mostly in central Florida.

METHODS

We reviewed the seasonal bird reports in the *Florida Field Naturalist* and *American Birds/National Audubon Society Field Notes* from January 1991 through December 1996 for published White-tailed Kite sightings. We sought information on unpublished reports by posting a request for assistance in the Summer 1996 Florida Ornithological Society Newsletter, but we received only one notice of a single kite sighting from south Florida. Personal contact with a number of observers resulted in seven additional kite reports in central Florida. In Figure 1 and Appendix 1, we have added five kite sightings in 1997, but these are excluded from other tabulations. Following Robertson and Woolfenden (1992), we define central Florida as the area from Citrus, Sumter, Lake, and Volusia counties south through Sarasota, DeSoto, Highlands, Okeechobee, and St. Lucie counties.

RESULTS

Kale (1974) listed a rate of 0.26 White-tailed Kite reports in Florida from 1900 to 1949, and 0.91 reports per year from 1961 to 1972. He listed 8 reports prior to 1900, 10 from 1900 to 1949, 2 from 1950 to 1960 (both in 1954), and 11 from 1961 to 1972. Kale (1974) apparently excluded the two 1954 reports from his ratios, and obtained an incorrect figure for the ratio of kites observed from 1900 to 1949. The correct rate is 0.20. With additions of other pre-1973 reports published in Curnutt (1989) and Stevenson and Anderson (1994), we compiled 13 White-tailed Kite reports in Florida prior to 1900, 19 from 1900 to 1960, and 14 from 1961 to 1972. Thus, Kale's (1974) data can be amended to 0.31 reports per year from 1900 to 1960, and 1.16 reports per year from 1961 to 1972. Curnutt and Hoffman (1992) compiled 38 kite sightings from 1973 to 1990, a rate of 2.11 reports per year. For this paper, we compiled 67 sightings from 1991 to 1996, which results in a rate of 11.16 reports per year. This rate is greater than a five-fold increase from the period from 1973 to 1990, and the total number of sightings from 1991 to 1996 (67) approaches the total number of kite reports from the previous 165 years (84).

On the 1991 Lake Placid Christmas Bird Count (22 Dec.), B. Pranty and three others found a White-tailed Kite at Scarborough Ranch in southern Highlands County. This observation was the first in the county since 1964 (Stevenson and Anderson 1994), but numerous others followed quickly. We compiled 17 reports of one or two White-tailed Kites in Highlands County from 1991 to 1996.

We compiled 21 additional reports of White-tailed Kites in other counties in central Florida from 1991 to 1996: seven in Brevard, one in DeSoto, one in Okeechobee, seven in Osceola, three in Polk, and two in Sarasota (Figure 1 and Appendix 1). None of the reports in central Florida in 1991 and 1992 were during the breeding season, but in 1993 birds were reported in spring and summer in Brevard, Highlands, and Osceola counties. The trend of increasing number of reports during the breeding season continued through 1996. In "late spring" 1994, a pair of adult kites and one juvenile were observed in southern Brevard County (B. Wetmore *in* McMillian and Pranty 1997), the first indication of breeding in the region since 1930. White-tailed Kites built a nest in southern Highlands County in 1996 (McMillian and Pranty 1997).

Curnutt and Hoffman (1992) pointed out that prior to 1973, 61% (n = 19) of the White-tailed Kite reports in Florida were from the middle third of the peninsula, while only 22% (n = 7) were from the southern third. From 1973 to 1990, only 23% (n = 9) of the kite sightings were in central Florida, while 69% (n = 27) were in south Florida. The south Florida reports included 13 nesting attempts, while all reports in central Florida were outside the breeding season. From 1991 to 1996, however, 56% (n = 38) of the White-tailed Kite reports in the state occurred in central Florida, while only 35% (n = 24) were in south Florida.

DISCUSSION

There are a number of biases and problems when attempting to calculate the number of kite reports in Florida over a period of more than 100 years (e.g., differences in observation and reporting methods, and multiple sightings of the same bird or birds in recent years). Although the number of observers in Florida certainly has increased in recent decades, this alone probably does not explain the increase of over 500% in kite reports between the periods 1973 to 1990 and 1991 to 1996.

Furthermore, the increase of White-tailed Kite reports in Florida beginning in the 1960s corresponds with a great increase in range and numbers of the species throughout its North and Central American range during the same period (Eisenmann 1971, Pruett-Jones et al. 1980, Gatz et al. 1988). Dunk (1995:3) describes White-tailed Kite breeding habitats as "low elevation grassland, agricultural, wetland, oak-woodland, or savannah habitats. Riparian areas adjacent to open areas also [are] used." Kite reoccupation of formerly occupied areas, and recent expansion into previously unoccupied areas, may relate to the creation or improvement of rangeland and cropland habitats as humans cleared forests and irrigated arid lands (Eisenmann 1971, Pru-

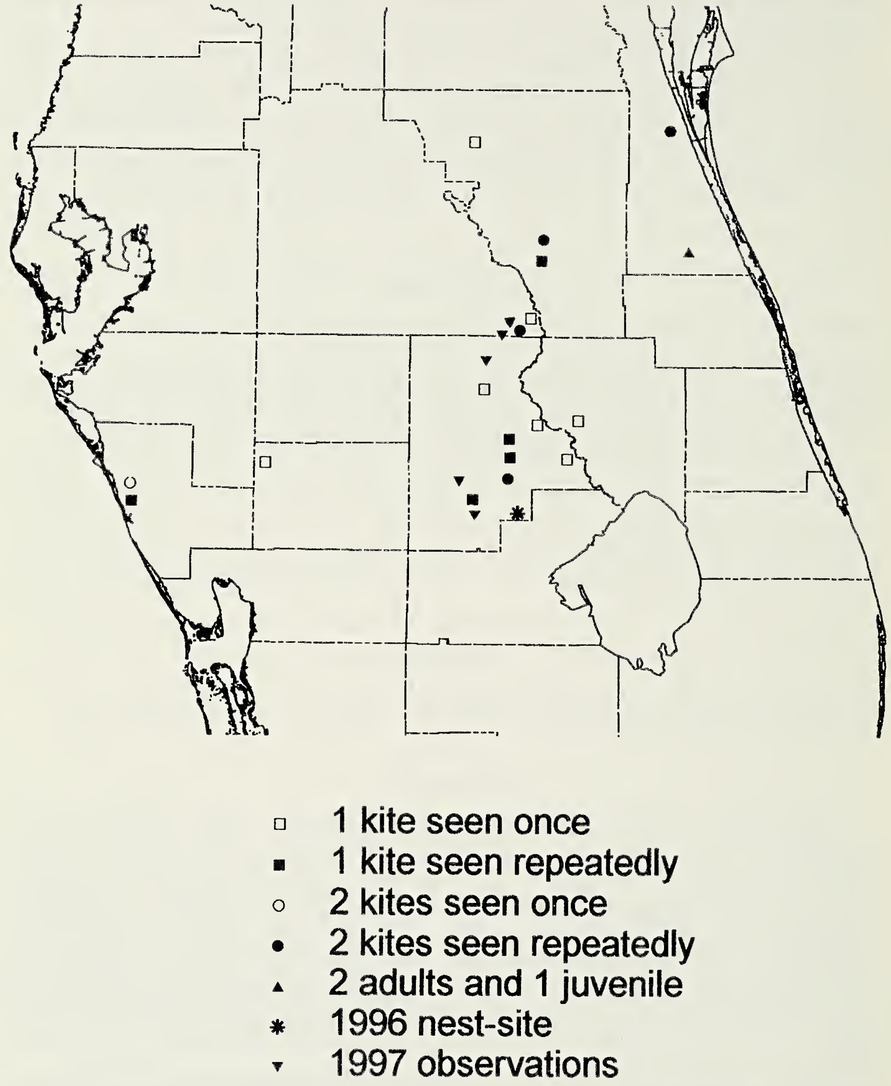

Figure 1. Distribution of the White-tailed Kite in central Florida, 1991 to 1996.

ett-Jones et al. 1980, Gatz et al. 1988). In Florida, the amount of rangeland and cropland habitats increased from 2.5 million ha (17%) in 1936 to 4.2 million ha (30%) in 1987 (Kautz 1993). The majority of the increase since 1959 was due to widespread conversion of forested lands in central and south Florida to cattle pastures (Kautz 1993).

Curnutt and Hoffman (1992:5) documented a "major increase" in White-tailed Kite reports in the eastern Everglades from 1987 to 1990, the latter two years occurring during a severe drought in the region. They wrote that shorter hydroperiods might benefit this species, and suggested that water management practices designed to aid the recovery of the Snail Kite (*Rostrhamus sociabilis*) might adversely affect White-tailed Kites in that region.

It is not clear whether migration, nomadism, vagrancy, or a combination of these factors is responsible for the recent increase in White-tailed Kite sightings in Florida. (We consider it unlikely that a breeding population could have been overlooked in the southern half of the peninsula for 60+ years). In an attempt to determine the source of the birds that have reoccupied Florida in recent years, we compiled all kite reports in the state outside their current breeding range (Figure 2 and Appendix 2). Of 20 reports that have been published from northern Florida from 1824 to 1996, one report lacks a date, eight reports occurred in fall (August, October-November), seven in winter (December-February), four in spring (March-April), and none in late spring and summer (May-July). Dunk (1995:3) states that there is "no information" that White-tailed Kites migrate anywhere in their extensive range. Based on the summary of observations in north Florida (Figure 2), we agree with Curnutt and Hoffman (1992) that small numbers of White-tailed Kites from western North America move eastward in fall along the Gulf coast to winter in central and south Florida, and possibly return to the West in spring.

Movement of some western-breeding birds to Florida has been noted for over 100 years (Ridgway 1874, McAtee et al. 1944, Curnutt and Hoffman 1992). Over a dozen species that breed in the Rocky Mountains, western plains, or southwestern deserts regularly move eastward or southeastward to winter in Florida. These birds include Swainson's Hawk (*Buteo swainsoni*), Franklin's Gull (*Larus pipixcan*), White-winged Dove (*Zenaida asiatica*), Groove-billed Ani (*Crotophaga ani*), Buff-bellied Hummingbird (*Amazilia yucatanensis*), Rufous Hummingbird (*Selasphorus rufus*), Vermillion Flycatcher (*Pyrocephalus rubinus*), Ash-throated Flycatcher (*Myiarchus cinerascens*), Scissor-tailed Flycatcher (*Tyrannus forficatus*), Sprague's Pipit (*Anthus spragueii*), and Bronzed Cowbird (*Molothrus aeneus*) (McAtee et al. 1944, Curnutt and Hoffman 1992). To this list we add Black-chinned Hummingbird (*Archilochus alexandri*).

Based on recent nesting attempts in Louisiana and Mississippi (*in* Dunk 1995), expansion of the White-tailed Kite as a breeding species into northern Florida seems plausible. In June 1997, Brian Millsap (pers. comm.) observed an adult kite in suitable nesting and foraging habitats 8 km west of Live Oak in Suwannee County. This is the first observation of a White-tailed Kite during the summer months in northern Florida.

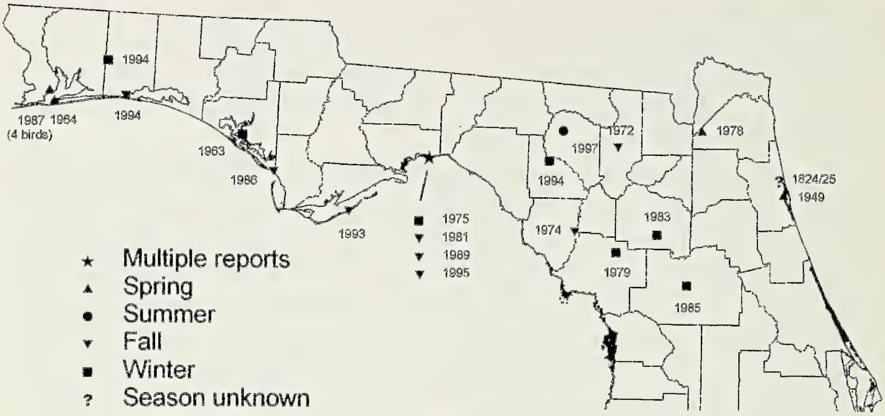

Figure 2. Distribution of the White-tailed Kite in the Florida Panhandle and north Florida, 1824 to 1997. The symbols in Lafayette and Marion counties have been placed randomly because specific locations of the kites in these counties were not indicated in the literature.

Rangeland and cropland habitats in Florida decreased 10% from 1980 to 1987, as these lands were converted to urban and suburban areas (Kautz 1993). Additional areas of "open space" undoubtedly will continue to be lost to development in the next 25 to 30 years. Nevertheless, we expect that the White-tailed Kite will continue to increase its range and numbers in Florida, especially in the central peninsula.

ACKNOWLEDGMENTS

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Appendix 1. White-tailed Kite reports in central Florida, 1991 to 1996, grouped by location. Unless noted otherwise, all reports were published originally in the Field Observations Committee reports in the *Florida Field Naturalist* (Cox 1992, Pranty 1992-1997).

County	Location	Number[1]	Date(s)	Observer(s)
Brevard	SR-509 ca. 0.8 km W of I-95	2a	1991, frequent	*fide* Herb Kale[a]
"	"	1a	17 Nov 1991	Dick Novier (pers. comm.)
"	Cocoa CBC	1	19 Dec 1992	*fide* Marianne Cherrington
"	S of Palm Bay W of SR-507	1-2a	Jun 1993 ff	Bruce Wetmore
"	"	2a	30 Dec 1993-16 Jan 1994	Bill and Shirley Hills
"	"	2a, 1j	"late spring" 1994	Bruce Wetmore (pers. comm.)
"	"	1a	10 Dec 1994-12 Feb 1995	Bill and Shirley Hills
DeSoto[b]	SR-70 *ca* 18 km W of Arcadia	1a	11 Nov 1994	John Fitzpatrick
Highlands	Archbold Biological Station	1a	14 Jan 1992	Jill Goldstein[c]
"	"	1a	22 Jan 1992	Jack Hailman[c]
"	"	1a	19 Mar 1996	Chris Jonas
"	"	1a	9 Mar 1997	Ron Smith (pers. comm.)
"	Avon Park Air Force Range (Cannady Grade)	1a	late Jan 1997	Dave Barber (pers. comm.)
"	Buck Island Ranch	1a	16 Oct 1995 ff	Mike McMillian et al.
"	"	2a, 3n	21 Mar-19 May 1996	Steven Christman et al.
"	"	1a	16 Dec 1996	Mike McMillian
"	CR-721, 5-8 km S of US-98	1a	23 Jun 1993	Doug Stotz
"	E of Sebring	1a	18 Jan 1995	Bruce and Marion Kittredge
"	Placid Lakes Estates	1a	15 Mar 1997	Curt Adkisson (pers. comm.)
"	Scarborough Ranch area	1a	22 Dec 1991	Bill Pranty et al.

[1] Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestlings.

[a] Stevenson and Anderson (1994).

[b] Listed erroneously as Manatee County in *Florida Field Nat.* 23:47.

[c] Archbold Biological Station, unpubl. data.

[d] Peter Vickery pers. comm.

Appendix 1. (continued) White-tailed Kite reports in central Florida, 1991 to 1996, grouped by location. Unless noted otherwise, all reports were published originally in the Field Observations Committee reports in the *Florida Field Naturalist* (Cox 1992, Pranty 1992-1997).

County	Location	Number[1]	Date(s)	Observer(s)
Highlands	Scarborough Ranch area	1a	27 Dec 1992	Bill Pranty et al.
"	"	1a	3 Feb 1993	Don Ford
"	"	1a	26 Apr 1993	John Fitzpatrick
"	"	2a	27 Dec 1993	Wes Biggs et al.
"	"	2a	27 Dec 1994	Bill Pranty et al.
"	"	2a	27 Dec 1995	*fide* Glen Woolfenden
"	SE shore of Lake Istokpoga	1a, 2a	10, 11 Feb 1996	Steve McGehee et al.
"	US-98 at Istokpoga Canal	1a	19 Jul 1996	Laurie and Paul Gray
Highlands and Polk	Avon Park Air Force Range (Alpha Range)	1a	30 May 1997	Nathalie Hamel (pers. comm.) and Allison Mains (pers. comm.)
Okeechobee	Basinger: Walker Road, ca. 1 km N of US-98	1a	ca. Aug-Sep 1996	Paul Gray (pers. comm.)
Osceola	Kissimmee Park Road	1a	7 Feb 1996	Wes Biggs
"	Three Lakes WMA (middle)	2a	1993-1995	Sue Riffe et al.
"	"	2a	22 Feb 1995	Steve McGehee and Vicky Dreitz
"	"	1a	22 Jan 1996	Dianne Williams and Wes Biggs
"	Three Lakes WMA (S part)	1a	Mar-Jul 1995	Greg Shriver[d]
"	"	1a	22 Mar 1996	Peter Vickery et al.
"	"	1a	Winter 1996-1997	Tylan Dean (pers. comm.)
Polk	Avon Park Air Force Range (Tick Island Marsh)	2a	21 Jun 1996	Tylan Dean and Cammy Collins
"	"	1-2a	Fall 1996-Feb 1997	Tylan Dean (pers. comm.) et al.

[1] Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestlings.

[a] Stevenson and Anderson (1994).

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Appendix 1. (continued) White-tailed Kite reports in central Florida, 1991 to 1996, grouped by location. Unless noted otherwise, all reports were published originally in the Field Observations Committee reports in the *Florida Field Naturalist* (Cox 1992, Pranty 1992-1997).

County	Location	Number[1]	Date(s)	Observer(s)
Polk	Avon Park Air Force Range (Blood Grade)	1a	4 Jun 1997	Dave Leonard (pers. comm.) and Allison Mains (pers. comm.)
"	River Ranch Acres (just W of Kicco WMA)	1a	31 Jan 1996	Larry Riopelle (pers. comm.) and Nathalie Hamel (pers. comm.)
Sarasota	Osprey	2a	20 Oct 1991	Robert Dye
"	Oscar Scherer State Park	1	Early Jan-23 Jan 1995	Arnold Rawson

[1] Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestlings.

[a] Stevenson and Anderson (1994).

[b] Listed erroneously as Manatee County in *Florida Field Nat*. 23:47.

[c] Archbold Biological Station, unpubl. data.

[d] Peter Vickery pers. comm.

Appendix 2. White-tailed Kite reports from the Florida Panhandle and north Florida, 1824-1996.

County	Location	Number[1]	Date(s)	Reference
?	near St. Augustine	1	1824 or 1825	T. Peal *in* Curnutt and Hoffman 1992
St. Johns	near St. Augustine	1	12 Mar 1949	C. H. Pangburn *in* Sprunt 1954
Bay	Panama City	1	8 Jan 1963	Stevenson and Anderson 1994
Santa Rosa	Gulf Breeze	1	17 Apr 1964	Stevenson and Anderson 1994
Columbia	near Lake City	1a	1 Aug 1972	Stevenson and Anderson 1994
Dixie?	near Old Town	1	10 Nov 1974	Stevenson and Anderson 1994
Wakulla	St. Marks NWR	1	2 Feb 1975	Stevenson and Anderson 1994
Duval?	near Baldwin	1	4 Mar 1978	Stevenson and Anderson 1994
Levy	Bronson	1	14 Dec 1979	Stevenson and Anderson 1994
Wakulla	St. Marks NWR	1	1 Nov 1981	Stevenson and Anderson 1994
Alachua	Paynes Prairie SP	1	12 Feb 1983	Stevenson and Anderson 1994
Marion	?	1	1 Feb 1985	Stevenson and Anderson 1994
Bay	Mexico Beach	1	18 Oct 1986	Stevenson and Anderson 1994
Escambia	Pensacola	4	16 Mar 1987	Stevenson and Anderson 1994
Wakulla	St. Marks NWR	1	29 Nov 1989	C. and R. Christen *in* Stevenson and Anderson 1994
Franklin	St. George Island	1	23 Oct 1993	D. and E. White *in* Pranty 1994
Okaloosa	Fort Walton Beach	1	29-30 Oct 1994	B. Atherton et al. *in* Pranty 1995a
Lafayette	northern	1a	11 Dec 1994	D. and K. Dees *in* Pranty 1995b
Okaloosa	north of Holt	1	30 Dec 1994	R. Larson *in* Pranty 1995b
Wakulla	St. Marks NWR	1	30 Oct 1995	G. Weymouth *in* Pranty 1996

[1] Number of individuals and age class: a = adult plumage, j = juvenile plumage, n = nestlings.

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AMERICAN KESTREL DISTRIBUTION AND USE OF NEST BOXES IN THE COASTAL PLAINS OF GEORGIA

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Abstract.—Four hundred and two nest boxes were erected on the coastal plain in Georgia to establish baseline data concerning the breeding biology of the American Kestrel (*Falco sparverius*) in Georgia during 1994 and 1995. Nest box occupancy averaged 3%, although occupancy was 15% at Fort Gordon military base. Clutch size averaged 4.9, and nesting success (at least one kestrel fledged) was 62%. Overall, productivity averaged 2.7 young fledged per nest attempt, although an average of four young fledged from each successful nest. Fifty-two of 56 kestrels fledged from boxes within Fort Gordon. Small body size of the kestrels in our study suggests that the American Kestrel breeding throughout the coastal plains in Georgia could be the subspecies, *Falco sparverius paulus.*

Only 2 of 17 subspecies of American Kestrels (*Falco sparverius*) occur in the southeastern United States (White 1994). *F. s. paulus* is a non-migratory resident that breeds from Florida, north to the coastal plains of Georgia, South Carolina, Alabama, and west to Louisiana and Texas (Chapman 1928; Griffin 1939, 1940; Norris 1941; Tomkins 1942, 1948; Brown and Amadon 1968; McFarlane 1973; Hoffman and Collopy 1987, 1988; Johnsgard 1990; Layne and Smith 1992). The northern subspecies (*F. s. sparverius*) only occurs in the coastal plains of the southeastern states as a common migrant and winter resident. Its breeding range extends from western Mexico to central Alaska in the west, and through central Canada in the east (Johnsgard 1990). *F. s. paulus* adults in Florida have a 24% smaller body weight than *sparverius* (Layne and Smith 1992), and some differences in plumage also have been noted (Baird et al. 1874, Wilson and Bonaparte 1878, Chapman 1928, Brown and Amadon 1968, McFarlane 1973).

A precipitous decline in populations of the Southeastern American Kestrel resulted in the classification of *F. s. paulus* as threatened in Florida in 1978 (Stys 1993). Most studies identified the loss of suitable nesting habitat as a major factor in causing this decline (Hoffman 1983, Bohall 1984, Hoffman and Collopy 1988). Burleigh (1958) listed the "Little American Kestrel" (*F. s. paulus*) as resident within the Coastal Plains, but local in its distribution. Neither baseline population figures nor any published accounts of kestrel densities in Georgia exist, but the Breeding Bird Survey (BBS) data imply that populations have been consistently low for about the past three decades (Fuller et al. 1987, Price et al. 1995, B. Peterjohn pers. comm.). To survey statewide kestrel populations and promote the stabilization, and the eventual increase of the American Kestrel (*F. sparverius*) in Georgia, we erected nest boxes in Georgia's coastal plains, in areas of suitable habitat. Based on previous nest box studies (Hamerstrom et al. 1973, Cely and Sorrow 1988, Loftin 1992, Wheeler 1992, Jacobs 1995, J. Smallwood pers. comm.), we assumed that if we put up boxes across the state and, resident kestrels would begin using the boxes.

STUDY AREA AND METHODS

Four hundred and two nest boxes were constructed from untreated, rough-cut cypress, pine, or cedar boards 1.3 to 2.5 cm thick (Varland and Loughin 1993, J. Smallwood, pers. comm.). The general dimensions of the boxes were 23 × 23 × 37.5 cm (1 × w × h), with a 7.6 cm hole 25 cm from the bottom of the front panel. A few boxes were arranged horizontally with the opening to the nest box located on the bottom rear corner of the box, in an attempt to dissuade European Starlings (*Sturnus vulgaris*) use of the boxes.

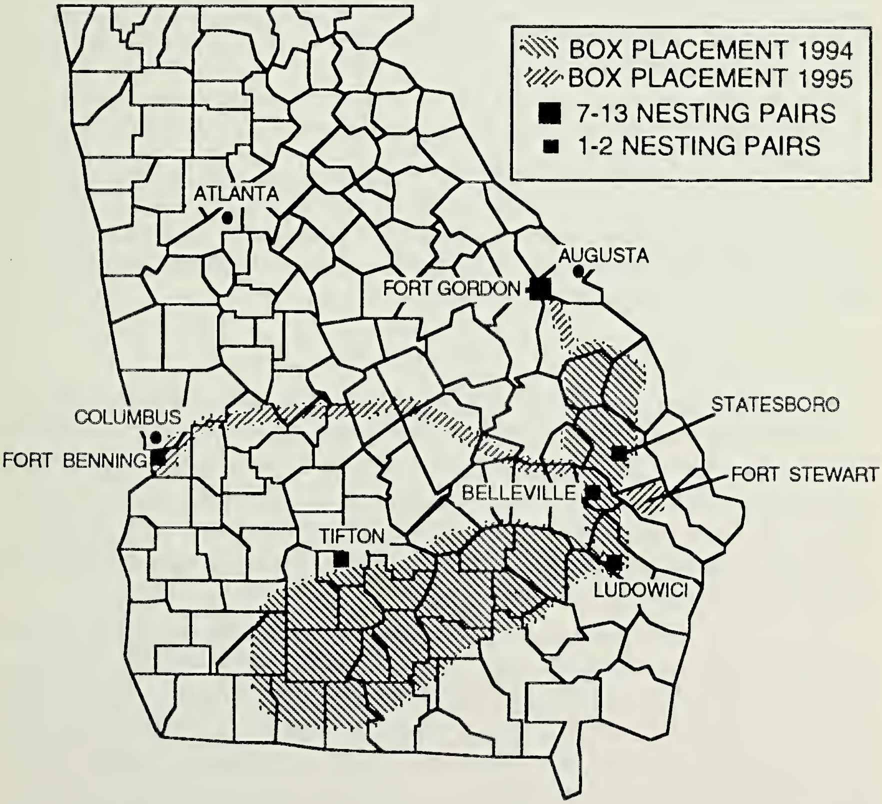

Figure 1. Southeastern American Kestrel nest-box placement and nesting locations within the coastal plain of Georgia during 1994 and 1995.

Nest boxes were erected between January and March in both years of the study. In 1994, 29 nest boxes were placed on Fort Gordon military base (Richmond County), southwest of Augusta. Also, 201 nest boxes were placed along transects extending from Girard (Burke County) south to Jesup (Wayne County), and across southern Georgia to Thomas County in southwestern Georgia (Figure 1). In 1995, 42 additional boxes were placed at Fort Gordon, and 130 other boxes were spread across other areas of the coastal plains as follows: on Interstate 16 highway signs from Statesboro to GA 96, then west to Columbus (Chatahoochee County) at Fort Benning military base; along U.S. 25 from Statesboro (Bulloch County) north to Hepzibah (Richmond County); at Joseph Kennedy Farm Correctional Institute (Toombs County); at Rogers Correctional Institute (Tattnall County); and on Fort Stewart military base (Bryan, Liberty, Long, Tattnall, and Evans Counties) (Figure 1). Most nest boxes were spaced about 0.8 km apart, except on military bases where some were placed closer together. Boxes were mounted on utility poles, or trees 4 to 5m above ground, along roadways adjacent to pastures, fallow fields, agricultural areas, and hayfields. Approximately 3 cm of pine or cedar shavings were placed in the bottom of each box (wood shavings were not used in nest boxes at Fort Gordon in 1994). Nest boxes were checked at least once a month from March through the end of July for eggs or young. Ages of young were estimated after Griggs and Steenhof (1993).

Fifteen adult kestrels were captured in the summer for banding and measurements using a bal-chatri trap. Mass was obtained with an electronic balance accurate to 0.1g, and measurements of the middle toe, middle talon, beak, and beak and cere lengths were made using digital calipers accurate to 0.01mm. Not all measurements were made on all birds handled. Permanent residency was assessed by re-trapping the summer-banded kestrels during the subsequent winter.

Statistical analyses were done with JMP 3.0 (SAS Institute Inc. 1994). A z-test of the difference between two independent proportions was used to analyze differences in nest box occupancy and nesting success between Fort Gordon and all other nest boxes between and within years (Kachigan 1986). The difference in measurements between adult female and male kestrels were analyzed by a one-tailed Student's t-test. Comparisons were made between reproduction at Fort Gordon and all other nestbox sites, because of the higher population levels at Fort Gordon. All results were considered significant if a probability (P) value of 0.05 or less was obtained.

RESULTS

Overall, kestrel nest box occupancy did not differ significantly between 1994 (2%) and 1995 (4%) ($z = 1.76, P > 0.05$). Kestrels nested in 10% of 29 nest boxes inside Fort Gordon, which was significantly greater than nest-box use in the remainder of the state in 1994 (1% of 195) ($z = 3.17, P < 0.05$). In 1995, they nested in 21% of 71 nest boxes at Ft. Gordon and 0.3% of 331 other boxes monitored in 1995, also a significant difference ($z = 7.05, P < 0.05$).

Kestrels laid at least one egg in boxes 21 times during the two-year study. Thirteen (62%) of the nesting attempts were successful (fledged at least one kestrel). Nesting success (percentage of boxes in which at least one young fledged) was significantly higher in 1995 (75% of 16 boxes) than 1994 (20% of 5 boxes) ($z = 2.30, P < 0.05$). In 1994, one of three boxes used by kestrels in Fort Gordon was successful, whereas neither of the two boxes used by the same pair of kestrels in another area of the state was successful. During breeding in 1995 kestrels were

Table 1. Hatching success and sex of American Kestrel young fledged from nest boxes with complete clutches (at least 4 eggs) in the coastal plains of Georgia.

Location	Year	No. nest boxes	No. nests	No. eggs laid	No. young fledged	No. males fledged	No. females fledged
Fort Gordon	1994	29	3	13	3	3	0
	1995	71	13	67	49[a]	23	17
Other sites	1994	201	1	5	0	0	0
	1995	331	1	4	4	1	3
Totals			18	89	56	27	20

[a] Number is greater than the total number of males and females fledged because sex was not determined before young fledged in two nest boxes.

successful in 11 of 15 (73%) nest boxes used in Fort Gordon, and one other nest box about 165 km south of Fort Gordon.

Eighty-nine eggs were laid in the 18 complete-clutch nests (minimum of 4 eggs per nest) during the two-year study, with a mean of 4.94 eggs per clutch (range = 4 to 6) (Table 1). An average of four young (range = 3 to 6) per box fledged from the 14 successful nest boxes. There were slightly more males than females fledged during the two-years of the study (Table 1). Two single-sex clutches were observed, one of three males in 1994, and one of five males in 1995.

Nests in other artificial structures also were documented during the study. In 1994 two pairs nested in buildings on Fort Gordon and fledged three and four young. A pair that nested in a house near Bellville (about 40 km southwest of Statesboro) fledged at least one young. A nest in a metal cross beam at a power substation in Statesboro was unsuccessful. Two pairs nested in buildings at Fort Gordon in 1995 and fledged at least one young each. Based on extensive field observations, no other pairs of kestrels nested at Fort Gordon or the vicinity in either 1994 or 1995. Only one other pair of kestrels (near Ludowici) was observed during numerous trips covering nearly 10,000 km throughout the coastal plains of Georgia during the study; however, we received reports of birds breeding in Tifton, and Fort Benning, near Columbus (Figure 1).

The earliest date of nest initiation was 10 April and the latest was 18 May in the known nests that fledged at least one kestrel in 1994. Of the 14 successful nests in 1995 the earliest date of nest initiation was 22 March and the latest was 15 May.

Eight kestrels were banded as nestlings at Fort Gordon military base and 15 adults (one in Evans County and 14 at Fort Gordon) were captured and banded in 1994. Four kestrels (one juvenile and three adults) banded at Fort Gordon in the summer of 1994 were re-trapped there between January and February 1995, two within 100 m of their original capture-sites.

Adult females were significantly heavier ($t = 1.77$, $P < 0.05$; Table 2) and also had significantly larger combined beak and cere lengths than males ($t = 1.92$, $P < 0.05$; Table 2). Females also had slightly longer beaks, middle toes, and middle claws, but the differences were not significant (Table 2). Nestling kestrels were divided into five age groups. The mass of the females was significantly greater than the males at all five stages between two and four weeks of age (two-tailed t-test, $P < 0.05$; Table 3).

In addition to the American Kestrel, 10 other species of cavity-nesting birds used the nest boxes during the two-year study (Breen 1995). Starlings nested in all of the boxes with the entrance hole on the bottom rear of the box.

DISCUSSION

Availability of suitable nest cavities in trees or other structures, the presence of adequate prey, and open habitat seem to be the most important factors for successful breeding of American Kestrels in the United States (Balgooyen 1976, Johnsgard 1990). In the southern coastal plains, particularly in Florida, nest sites seem to be the major limiting factor for Southeastern American Kestrels (*F. s. paulus*) (Bohall-Wood and Collopy 1986, Loftin 1992).

Compared to other kestrel nest-box programs in the United States (Stahlecker and Griese 1979, Wilmers 1982, Varland and Loughin 1993), nest box occupancy by kestrels in our study area was exceptionally low in both years of the study (2 to 4%). Low occupancy was expected, because only 50 American Kestrels had been reported on more than 1100 BBS routes run in Georgia during the past 28 years (B. Peterjohn pers. comm.), and recent surveys by wildlife biologists at the Georgia Department of Natural Resources had indicated exceptionally low numbers of kestrels in the state (B. Winn pers. comm.).

The nesting success (62%) of kestrels over the two years of our study was within the range found in other nest box studies in North America (20 to 83%) (Hamerstrom et al. 1973, Stahlecker and Griese 1979, Toland and Elder 1987, Varland and Loughin 1993, Jacobs 1995). The absence of wood chips in the 1994 nest boxes at Fort Gordon likely accounts for the fact that all of the eggs cracked in the two unsuccessful boxes. The eggs were laid on top of a partially-built starling nest in the one successful nest on the base that year. The earliest and latest egg laying date for the kestrels nesting in our study are similar to those reported for *F. s. paulus* in Florida (Loftin 1992, J. Smallwood pers. comm.) and South Carolina (Cely and Sorrow 1988), and the av-

Table 2. **Size comparisons of adult American Kestrels (*Falco sparverius*) trapped in the Georgia coastal plains during the spring and summer of 1994 and 1995.**

	Male				Female			
	n	Mean	SE	Range	n	Mean	SE	Range
Mass (g)*	9	97.1	1.62	88.0-104.2	6	102.0	1.98	95.1-107.5
Beak and cere (mm)*	8	14.6	0.44	11.5-15.8	6	15.9	0.51	14.7-17.3
Beak (mm)	8	11.3	0.36	8.8-12.6	6	12.3	0.42	10.9-12.9
Middle toe (mm)	9	20.2	0.41	17.4-21.3	6	20.8	0.50	19.4-22.7
Middle talon (mm)	9	9.1	0.34	6.1-9.6	6	9.3	0.42	7.8-10.5

*Females significantly ($P < 0.05$) larger than males (one-tailed *t*-test).

Table 3. Mass of male and female nestling American Kestrels banded in south Georgia. Females were significantly larger than males ($P < 0.05$, two-tailed t-test) at all age intervals.

Age interval (days)	Male			Female		
	n	Mean	SE	n	Mean	SE
14-16	3	85.2	6.5	2	108.7	7.7
17-19	7	105.0	3.5	5	115.8	2.2
20-22	10	114.1	0.9	4	124.5	0.9
23-25	5	108.7	2.8	9	118.7	1.7
26-28	2	103.7	2.8	3	116.2	3.3

erage clutch size was similar to other nest-box studies (Loftin 1992, Varland and Loughin 1993).

It became apparent after the first year's observations that there were more kestrels nesting at Fort Gordon military base than there were throughout the rest of the state. Small numbers of kestrels have apparently nested in old barracks and other buildings at Fort Gordon for over 20 years (Denton 1975). Unfortunately, most of those structures were removed at the end of 1995. We believe that 11 pairs of kestrels that bred at Fort Gordon in 1995 were probably derived from the 1994 stock and not from immigrating birds, because we extensively surveyed the base and surrounding areas for nesting activity in 1994. Jacobs (1995) reported 7 of 10 kestrels returned to breed within 35 km of their hatching site even in migratory kestrels (*F. s. sparverius*). Three other reports of kestrels nesting in Georgia (Figure 1) were far south of Fort Gordon.

The re-trapping of four summer-banded kestrels at Fort Gordon the following winter is indicative of a year-round resident population. Also, recorded masses, middle toe and claw lengths (Table 2) are essentially the same as the size-ranges of *F. s. paulus* in Florida (Layne and Smith 1992, J. Smallwood pers. comm.). Resident status and small size indicate that the kestrels breeding in our areas are *F. s. paulus*. This is further supported by the fact that we have counted more than 200 kestrels in Bulloch County during the winter (Halas and Parrish, unpublished), but have had only a single pair present during the summer. Presumably, the winter birds were mostly *F. s. sparverius*, since summer *paulus* kestrels appeared to disperse no more than about 40 km from their breeding areas in the early fall after reproduction was complete (Breen 1995).

All 26 confirmed kestrel nest sites in nest boxes and other artificial structures were located in sandhill habitats that dominate the coastal plains. Fort Gordon, where most of the kestrels nested, lies on the upper edge of the fall line of the coastal plains and is dominated by sandhill communities made up of scrub oaks and various pines. This propensity for sandhill nest sites is identical to *F. s. paulus* breeding preferences in Florida, where kestrels nest in longleaf pine (*Pinus palustris*) - turkey oak (*Quercus lacevis*) sandhill communities (Bohall-Wood and Collopy 1987, Loftin 1992). Kestrels breeding in the coastal plains of South Carolina also have been reported to prefer sandhill communities (Cely and Sorrow 1988). All but a few of the nest sites at Fort Gordon are associated with the contonement area that is dominated by buildings, parade grounds and other open areas. The more remote nest boxes are situated near open small-firearm ranges. Several firearm ranges were closed by the base biologist to reduce interference with reproducing kestrels when boxes near those areas were used during the study.

Burleigh (1958) listed 11 counties in the coastal plains (Appling, Baker, Ben Hill, Burke, Camden, Charlton, Chatham, Long, Screven, Thomas, and Washington) where kestrels had been found in the summer in Georgia. Denton (1975) first reported breeding kestrels at Fort Gordon (Richmond County). We observed kestrels during the summer in only one of those counties (Long County), and four others not listed by Burleigh (1958) during the two years of our study (Breen et al. 1995). Through the 1997 nesting season, we have personally observed kestrels nesting in the following coastal plains counties: Appling, Bulloch, Columbia, Evans, Long, Richmond, and Tatnall (Breen et al. 1995, Shuford and Parrish unpubl.). We have received reports of single, kestrel nests also in Bryan, Clarke, Chatahoochee, Floyd, Fulton, Glynn, Tift, and Turner counties to date (Shuford and Parrish unpubl.). No further reports are available from the Georgia Breeding Bird Atlas studies (T. Schneider pers. comm.). It is apparent from our studies that the exceptionally low populations of the American Kestrel on the coastal plains appear to warrant its listing as threatened in Georgia.

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NOTES

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FIRST REPORT OF FUERTES' RED-TAILED HAWK FROM FLORIDA

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The Red-tailed Hawk (*Buteo jamaicensis*) exhibits much variation in plumage coloration among age classes, color morphs, and geographical races. Over its wide range from Alaska to Panama to the Virgin Islands, 14 to 16 subspecies of Red-tailed Hawks have been recognized (Preston and Beane 1993); subspecies of the Great Plains tend to be the palest. In North America, five races are recognized: Eastern (*B. j. borealis*), Western (*B. j. calurus*), Harlan's (*B. j. harlani*), Fuertes (*B. j. fuertesi*) and Florida (*B. j. umbrinus*). Although plumage coloration intergrades occur among these races, the races exhibit recognizable coloration, and generally occupy geographically discrete ranges (Wheeler and Clark 1995).

Several sightings and specimens of color morphs or races of geographic variations have been reported from Florida (Table 1). Therefore, we recognize that geographic variation observed in Red-tailed Hawks is not easily assigned to diagnostic races. However, we observed a Red-tailed Hawk in Levy County, Florida, that displayed the "immaculate underparts" (Van Tyne and Sutton 1937) usually associated with Red-tailed Hawks from the region of Oklahoma, southwest Texas, and northeast Mexico (hereinafter referred to as *B. j. fuertesi*).

On 14 February 1996 at approximately 1615 along Route 24 in Levy County en route from Bronson to Gainesville, Florida, we observed a large, unusually pale hawk perched on a dead snag on the north side of the road. The hawk was buteo-shaped with a gleaming white breast; there was no band across the lower breast or upper belly as is usually seen in migrant or Florida Red-tailed Hawks (Howell 1932). The bird was perched about 45 m from the road and was facing west so that there was excellent afternoon light on its ventral surface. R. Norton studied the bird for nearly seven minutes using 8× Zeiss binoculars. (Weather conditions on that day were mild following an earlier period of cold weather from the west.) R. Norton observed the following field marks: upper belly lacking a band, flank streaks reduced to fine shaft lines ("a mere hair line along the shaft feather"; Van Tyne and Sutton 1937), thighs uniformly white, barring on tail much reduced, and the throat white. The plumage color of the bird's ventral surface was paler than any resident Florida Red-tailed Hawks either of us had seen. The head was a warm tawny-brown with white edges to the feathers. The face was brownish gray around the base of the bill and the eyes. The cere was yellow, and the bill appeared a little smaller than expected. The eyes were dark, the throat to breast was pure white, and the upper belly was without any streaks typical of birds of the southern Great Plains (Oklahoma and Texas; Wheeler and Clark 1995), thus eliminating other *Buteo* species such as the Ferruginous Hawk (*B. regalis*). The sides of the upper belly had warm brown or tawny shafts on three or four feathers close to the wing—a character which could not be seen with the naked eye. The underside of the tail was a light rufous-pink with a hint of a subterminal band.

As R. Norton exited the vehicle to see more of the back and tail, the hawk lifted off the snag, flew west, and dipped to show the typical red tail of an adult Red-tailed Hawk with

Table 1. Locations and dates of observations of out-of-range, non-breeding Red-tailed Hawks (*B. jamaicensis*) in Florida.

Race	Location	Date	Source[1]
borealis "krideri"	Jefferson Co.	26 Dec. 1980	1, 9
(whitish morph)	Leon Co.	2 Dec. 1994	2
	Leon Co.	2 Feb. 1995	2
	Leon Co.	29 No. 1995-Feb. 1996	3, 4
	Jefferson Co.	4 Jan.-20 Feb. 1996	4
borealis × *calurus* (intergrade)	Leon Co.	23 Dec. 1980	5, 10
abieticola	Brevard Co.	11 Mar. 1962	1, 5, 11
harlani	St. Lucie Co.	1 Jan. 1988	6
	St. Lucie Co.	16 Jan.-18 Mar. 1989	6
	Gulf Co.	14 No. 1991	3
jamaicensis	Dixie Co.	17 Mar. 1990	7
(dark morph)	Dade Co.	29 Dec. 1991	8

[1] Sources: 1 = Robertson and Woolfenden (1992); 2 = West and Pranty (1995); 3 = Pranty (1996a); 4 = Pranty (1996b); 5 = Stevenson and Anderson (1994); 6 = Blackshaw and Polisse (1990); 7 = Cox (1990); 8 = Cox (1992); 9 = specimen (TTRS 3680); 10 = specimen (TTRS 3681); 11 = specimen (WFVZ 20580).

little dark barring other than a darker band near the end of the tail. The color of the dorsal surface of the tail was a brilliant reddish-pink. We watched the bird fly west across Route 24 until out of sight in pine trees. J. Ripple revisited the location within the week for additional observation and photographs, but was not successful.

Compared to other possible light morphs of *B. jamaicensis* illustrated in a recent photographic guide (Wheeler and Clark 1995) and described in Preston and Beane (1993), the palest race is *B. j. fuertesi* of Oklahoma, Texas, and northeast Mexico. Of all the light forms *B. j. fuertesi*, breeds closest to Florida. The hawk we observed most closely resembles photograph RT30 in Wheeler and Clark's (1995) guide, but had even finer streaks with no suggestion of barring. We believe we observed a bird of the *B. j. fuertesi* population and the first to be reported from Florida.

Recognizing that some of the coldest weather on record for many midwestern and southern states occurred in January 1996, it seems likely that *B. j. fuertesi* would leave its normal wintering range. If our identification is correct, this occurrence of *B. j. fuertesi* in Levy County, Florida, would fit an apparent pattern of dispersal to the Gulf coast by species that normally winter inland (McAtee et al. 1944, V. Remsen pers. comm.). A number of western bird species [e.g., Lesser Nighthawk (*Chordeiles acutipennis*), Vaux's Swift (*Chaetura vauxi*), Black-chinned (*Archilochus alexandri*) and Rufous (*Selasphorus rufus*) hummingbirds, Western Kingbird (*Tyrannus verticalis*), Scissor-tailed (*T. forficatus*) and Vermillion (*Pyrocephalus rubinus*) flycatchers, and Gambel's White-crowned Sparrow (*Zonotrichia leucophrys gambelii*)] appear in the Florida panhandle, north-central, and sometimes southern Florida. These occurrences of western bird species in Florida represent a taxonomically broad migration from the western United States to Florida (McAtee et al. 1945).

We thank P. William Smith and Fred Lorer for their very helpful critical review and comments; J. V. Remsen, Museum of Natural History, Louisiana State University, and Tom Webber, Florida Museum of Natural History, University of Florida, for their comments and assistance; and Renee Ripple for editorial assistance.

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Florida Field Nat. 25(4):141-142, 1997.

WHITE-CROWNED PIGEON NORTH OF ITS KNOWN RANGE

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The White-crowned Pigeon (*Columba leucocephala*) is a sought-after Florida specialty that nests in colonies in the extreme southern peninsula and the Keys of Florida. The White-crowned Pigeon usually inhabits dense coastal forests where they feed on a variety of fruits and seeds, but they sometimes are found in residential areas. J. Ondrejko (*in* Paul 1988) reported several White-crowned Pigeons eating white millet from a feeder in Key West on 19 June 1988. Although a few overwinter in Florida, this species typically winters in the Bahamas, Cuba, Hispanola, and western Panama (Ehrlich et. al. 1988) and returns to Florida in April or May. There is one sight report of the White-crowned Pigeon outside Florida on 24 June and 2 July 1989 at Laguna Atascosa, Cameron County in extreme southern Texas (Lasley and Sexton 1989).

At 0700 on 16 April 1997, T. and B. Fleck saw a White-crowned Pigeon on a platform feeder in their back yard in Ft. Walton Beach, Okaloosa County, Florida. It was also seen for about 10 minutes that evening, and again at 0700 the next morning. At 0700 of 18 April I had a 10-minute unrestricted study of the bird with Zeiss 10 × 40B binoculars as it fed within 7 m of me. It appeared to be an adult male, all dark gray with a bright white crown and rows of greenish spots on the hind neck. It had a light iris, and the base of the bill was dull red, and the tip was white. The bird was apparently eating white millet from the mixed seed. Although wary of people, it aggressively chased away Common Grackles (*Quiscalus quiscula*), Blue Jays (*Cyanocitta cristata*), and Mourning Doves (*Zenaida macroura*). It was also seen sitting in large magnolia and pine trees near the back yard. Two other birders observed it at that feeder. The bird was later observed by C. and H. King at their feeder three blocks west. B. Fleck took a photograph of the bird on 22 April 1997 (TTRS p.591). It was last seen on 11 May at the King's feeder. By that time it had become far more tolerant of other birds at the feeder. This sighting was 290 km north of the northernmost sighting in St. Lucie County, Florida (Robertson and Woolfenden 1992).

Information from the National Oceanic and Atmospheric Administration Climate Diagnostic Center indicates that during the six days prior to 16 April, strong (10-12 knots) low-level winds blew from the southeast between Cuba and the Keys. It is possible this bird was headed to the Keys from Cuba, missed its landfall, and had a longer-than-usual flight.

I suggest this sighting represents an accidental occurrence of a wild White-crowned Pigeon rather than an escaped bird. This sighting should be cause for birders all along the Gulf coast to look for this species in April or May.

I thank Robert A. Duncan for his comments on this note.

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Florida Field Nat. 25(4):143-145, 1997.

RECENT NESTING OF THE WHITE-TAILED KITE IN CENTRAL FLORIDA

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The White-tailed Kite (*Elanus leucurus*) is an elegant raptor of grasslands and open woodlands of the Americas (Dunk 1995). In Florida, the last nesting record until the mid-1980s occurred in 1930 (Stevenson and Anderson 1994), but birds continued to be reported sporadically through the 1950s (Sprunt 1954, 1963). By the late 1980s and early 1990s, the number of kite reports had increased considerably, and birds were again nesting in Florida (King 1987, Curnutt 1989, Curnutt and Hoffman 1992). The number of kites reported in central Florida increased substantially in 1991 to 1996, and many kites were reported during the nesting season (Pranty and McMillian 1997). This note documents a White-tailed Kite nest in Highlands County in 1996: the first central Florida nesting record in 66 years. We also discuss a previously unpublished 1994 report of probable breeding in Brevard County, Florida, and summarize characteristics of White-tailed Kite nesting records from 1872 to present.

On 21 March 1996, S. Christman (pers. comm.) discovered a pair of White-tailed Kites copulating and building a nest at MacArthur Agro-Ecology Research Center (i.e., Buck Island Ranch), which is located in the southeastern corner of Highlands County. White-tailed Kites had been observed frequently at the Center since 16 October 1995. The ranch contains a mix of wet prairie and bahiagrass (*Paspalum notatum*) pastures, hardwood hammocks composed predominantly of live oaks (*Quercus virginianus*) and cabbage palms (*Sabal palmetto*), and scattered small wetlands. The area is part of the Indian Prairie Basin, an extensive watershed between Lake Istokpoga and Lake Okeechobee (Auman 1995). Since the area was converted to a cattle ranch, numerous small, shallow (<1 m deep) ditches grown to rushes (*Juncus* spp.), and larger, deeper ditches grown to water hyacinth (*Eichhomia crassipes*), water lettuce (*Pistia stratiotes*), pickerelweed (*Pontedaria cordata*), yellow pondlily (*Nuphar luteum*), and arrowhead (*Sagittaria* spp.) have drained the prairie. Elevation of the area is approximately 8.5 m above mean sea level.

M. McMillian monitored the nest from a distance during its construction. The nest was built 9.9 m above the ground in an 11-m black gum (*Nyssa sylvatica*) with a diameter at breast height (DBH) of 48.1 cm. The nest tree was part of an open copse of black gums surrounded by mixed wet prairie/bahiagrass pastures and small, scattered cabbage palm hammocks. The nest tree, somewhat isolated from other trees, was separated from its nearest neighbor by 19 m. The nest was composed of small diameter (2 to 5 mm) black gum twigs that were 10 to 30 cm in length, and was lined with dried grass.

The pasture containing the nest tree was burned in a prescribed fire on 10 April 1996. Although the nest tree was scorched to within 2 m of the nest, the nest was not abandoned. Subtracting an incubation period of 30 to 32 days (Hawbecker 1942 *in* Dunk 1995) from the hatching date of 11 May, egg laying must have been in progress the day of the burn.

After incubation appeared to be initiated by the female, we checked the nest weekly using an extendable mirror pole to determine clutch and brood sizes. When checked on 13 April, 20 April, 28 April, and 5 May, the nest contained four eggs. On the three April dates, the female was on the nest incubating, but on 5 May the female was perched above the nest. On 11 May the nest contained two recently hatched nestlings and one egg. A third hatchling was found dead on the ground underneath the nest (specimen to Archbold Biological Station, catalogue number GEW 5926, G. Woolfenden pers. comm.). The nest contained three nestlings on 19 May, and on 26 May the nest was empty and the adults were not present. We suspect the nest had been depredated 2 to 3 days earlier, possibly by American Crows (*Corvus brachyrhynchos*), raccoons (*Procyon lotor*), or Red-shouldered Hawks (*Buteo lineatus*). No White-tailed Kites were observed on the ranch again until 16 December 1996, when M. McMillian saw an adult near the nest site.

In June 1993, a White-tailed Kite was observed in southern Brevard County (B. Wetmore *in* Pranty 1995), on the north side of the Sottille Canal, 4.8 km west of State Road 507 (Babcock Street). The locale of the sighting is about 2.5 km south of Palm Bay, Florida, and 7.2 km north of the Indian River County line. Land use in the area is citrus groves and cattle pastures with scattered trees. Two kites were seen intermittently from 30 December 1993 to 16 January 1994 (B. and S. Hills *in* Pranty 1994). In "late spring" 1994, Bruce Wetmore (pers. comm. May 1997) observed two adult and one juvenile White-tailed Kites in this area, and kites were reported from the site through 12 February 1995 (B. and S. Hills *in* Pranty 1995). The observation of the two adults and juvenile was not published previously as a potential breeding report, but three factors lead us to conclude that this observation suggests breeding of the White-tailed Kite in Brevard County in 1994. First, the juvenile was observed with two adults during the nesting season. Second, the adults had been present for the previous 10 to 12 months. Third, juvenile kites are indistinguishable from adults on the basis of plumage by their first winter (Bammann 1975 *in* Dunk 1995), so the juvenile had to be a bird that fledged in 1994.

The fates of 17 of the 22 White-tailed Kite nests observed in Florida have been reported. Excluding one nest that failed because an oologist collected the eggs (Stevenson and Anderson 1994), eight nests (50%) were successful, and produced a total of 22 fledglings (2 to 4 fledglings per nest). The remaining eight nests failed to fledge any young. The fledgling rate for these 16 nests is 1.25 ± 1.34 fledglings for all nests, and 2.50 ± 0.53 fledglings per successful nest. Single nests in Broward County in 1986 (King 1987) and Dade County in 1991 (P. W. and S. A. Smith *in* Langridge 1991) successfully fledged young, but still contained one nestling each when checked last. We excluded these nestlings from our summary of fledgling production. Two studies in California recorded average numbers of fledglings for all nests with known fates of 1.63 ± 1.15 and 1.60 (no SD), and average numbers of fledglings per successful nests of 2.93 ± 1.51 and 3.20 ± 0.80 (Dunk 1995).

Nest shrub or tree species were reported for nine of the 22 kite nests found in Florida. One nest was built in a pine (*Pinus* spp.) (Stevenson and Anderson 1994), one in a bald cypress (*Taxodium distichum*) (Cumutt 1989), one in a citrus (*Citrus* spp.) (J. Baker *in* Pranty 1993a), one in a black gum (this note), two in oaks (*Quercus* spp.) (Stevenson and Anderson 1994), and three in wax myrtles (*Myrica cerifera*) (King 1987). Heights of eight of these nests ranged from 3.0 to 9.9 m and averaged 5.5 m (5.53 ± 2.69 m). To date, the Highlands County nest is the highest nest reported in Florida.

All nests in Florida were built in open or semi-open habitats. The four initial White-tailed Kite nests in Florida were built in native prairie habitats in central Florida, and 17 nests were built in the eastern Everglades, where hydrology and fire frequency have been altered significantly by human activities. The tendency for kites to nest in native or semi-native habitats with low levels of human activity has been reported elsewhere (Erichsen et al. 1996).

Despite the great increase in White-tailed Kite reports in Florida since 1991 (Pranty and McMillian 1997), most of the recent nesting attempts occurred prior to this period. Four nests were found in central Florida from 1872 to 1930 (Stevenson and Anderson 1994) and 13 nests in Broward and Dade counties from 1986 to 1990 (Curnutt and Hoffman 1992). Since then, only five additional nesting attempts have been reported: single nests in Broward and Dade counties in 1991 (Langridge 1991) and again in 1993 (Pranty 1993a, b), and the Highlands County nest in 1996. We believe that repeated observations of adult kites in spring and summer elsewhere in Brevard and Highlands counties, as well as in Osceola and Polk counties (Pranty and McMillian 1997) suggest that White-tailed Kites may be more widespread as a nesting species in central Florida than is known currently. Unlike kite habitat in south Florida, which is mostly publicly owned, much kite habitat in the prairie region of central Florida is located on large, private cattle ranches. Inaccessibility of these ranches prevents accurate assessment of kite numbers, distribution, and breeding status.

We thank MacArthur Agro-Ecology Research Center for the loan of equipment, and Archbold Biological Station for its library facilities. We especially thank Bruce Wetmore for informing us of the Brevard County potential breeding report. We thank Katie Dugger, Todd Engstrom, Dave Leonard, Steve McGehee, Ken Meyer, and Brian Millsap for their numerous helpful comments that improved the note considerably. This is contribution No. 30 of the MacArthur Agro-Ecology Research Center of Archbold Biological Station.

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REVIEW

Florida Field Nat. 25(4):146-147, 1997.

The Prairie Falcon.—Stanley H. Anderson and John R. Squires. 1997. University of Texas Press, Austin. ISBN 0-292-70474-7. $16.95 paper, $29.95 cloth. 168 pp., 19 color photographs, 8 line drawings, 1 map, 2 figs. Both authors live in Laramie, Wyoming, where they have had a long association with Prairie Falcons, the North American "desert falcon". Other desert falcons are the arctic Gyrfalcon and the Old World Saker, Lanner, and Laggar. Desert falcons are powerful, fast fliers, usually catching mammals, birds, and reptiles by low, rapid flights, in contrast to the stoops from high elevation typical of Peregrine Falcons.

The book is written for a general audience. The authors hope to stimulate interest in Prairie Falcons and to promote conservation of this magnificent bird. Although the authors clearly aim for scientific accuracy, citing the substantial pertinent literature, their book is a compilation of research by others plus their own general observations on Prairie Falcons. It is not a monograph reporting original research.

The book has four main sections. The first describes Prairie Falcons, discusses distribution and nest sites, hunting and food habits, and ecological interactions. Then comes a section on seasonal activities, a brief section on other raptors, and finally a discussion of Prairie Falcons and people, including falconry, pesticides, and captive breeding.

The cover has a handsome photo of a Prairie Falcon. The general layout of the book is attractive, and the writing is mostly clear. The 19 colored photos of falcons and falcon habitat and their captions are printed tipped to the left about 10 degrees. The book's designer must regard this odd presentation as attractive; by my old-fashioned standards, it is annoying and distracting—each new photo encountered looks accidentally askew. The line drawings are mostly re-drawn from other sources. But the re-drawings are crude and sometimes misrepresent the source drawing. For example, the cartoonish Fig. 3 on page 58, is labeled "Feeding display during Prairie Falcon courtship. After Cade 1982." But the original drawing on page 42 of Cade's "The Falcons of the World" (1982, Cornell Univ. Press) is actually a beautiful drawing of peregrine courtship-feeding. Although the Anderson-Squires version is "credited" to Cade in a sense, it is wrong for them to imply without comment that Prairie Falcon courtship is identical with that of the Peregrine Falcon and that their shapes and body proportions are identical. In the Cade drawing the food being presented is part of a small bird; in the Prairie Falcon sketch it has been transformed into a ground squirrel. Drawings on pages 56, 60 and 61, showing head-low display, hitched-wing display, and copulation, are also re-drawn from Cade's book. Again, elegantly rendered Peregrine Falcons are transformed crudely into caricatures of Prairie Falcons. Any reader would be excused for concluding that Cade's book actually had drawings or photos of these displays of the Prairie Falcon. It does not.

Having a single-volume popular treatment of this splendid bird is welcome. Unfortunately, the deficiencies of the re-drawn figures are repeated in the text. Once more, the authors list their sources at the end of each chapter and in the literature cited section at the end of the book. But there are no references to sources within the text (probably to prevent reader distraction), nor are quotations acknowledged for some material lifted verbatim or nearly so from other works.

Here is one example:

—Anderson and Squires, p. 103: "The Saker is another favorite hunting bird of Arab falconers. It is a smaller, rough-and-tumble version of the Gyrfalcon."

—Cade, p. 80: "Favorite hunting bird of Arab falconers, the saker is a rough-and-tumble version of the gyrfalcon."

The chapter titled "Prairie Falcons and Other Raptors" begins with a strange listing (pp. 87-90) of categories that suggests that eagles are the only members of the Family Accipitridae; harriers, accipiters, buteos, and falcons are listed confusingly below Osprey (Pandionidae), with no indication of what families they belong in. The authors know better; they straighten this out several pages later (pp. 100-101). A section on evolution attempts to sketch avian history from reptilian ancestors. Again, the treatment is so brief that it is not helpful and might better have been omitted. Hesperornis, for example, is described as resembling modern cormorants, with teeth, a long flexible neck, and a relatively short tail; the fact that it was essentially wingless is not mentioned. A surprising conclusion of the evolution section is: "In all likelihood, the grassland [= desert] falcons did not have an immediate common ancestor but evolved from forest-type falcons near the open areas they now inhabit." I doubt if this opinion is shared by any thoughtful student of raptor phylogeny. In the section "Other Desert Falcons," Anderson and Squires state that "Sakers often build stick nests in trees." This will come as a surprise to Tom Cade, whose treatment of alleged stick nest building in his monograph clearly indicates that he does not think any falcon does this, or at least that proof by direct observation has yet to be reported.

Despite these weak points, the book does its main job effectively. It portrays the Prairie Falcon as a magnificent raptor, uniquely adapted to its harsh, dry environment. The authors' respect for the bird and their love of the fine country it lives in shines through the text. Even though Prairie Falcons do not occur in Florida, the book provides a good summary for a general audience of Prairie Falcon biology in a single attractive volume. It would be a useful addition to school and community libraries.—**Harrison B. Tordoff**, Bell Museum of Natural History and Department of Ecology, Evolution, and Behavior, University of Minnesota, 100 Ecology, 1987 Upper Buford Circle, St. Paul, Minnesota, 55108.

FIELD OBSERVATIONS

Fla. Field Nat. 25(4):148-158, 1997.

Spring Report: March-May 1997.—The observations listed here are based on rare or unusual species or significant numbers of birds reported to the Florida Ornithological Society (FOS) Field Observations Committee (FOC). These reports have not been reviewed formally, thus they should be considered tentative.

Significant reports are welcomed for inclusion in future issues of this section. Reports should include the following information: species, number of individuals, age and sex of the bird(s), color morph if applicable, location (including county), date, observer(s), and significance of the report. Reporting periods are winter (December-February), spring (March-May), summer (June-July), and fall (August-November). Submit reports to regional compilers within two weeks after the close of each period, or to the state compiler within one month. Reports may be emailed to the state compiler at billpranty@hotmail.com.

Following the examples set by *Florida Bird Species: An Annotated List* (Robertson and Woolfenden 1992, FOS Spec. Publ. No. 6) and *The Birdlife of Florida* (Stevenson and Anderson 1994, Univ. Press of Florida), sight-only observations are considered "reports," while only those supported by verifiable evidence (photographs, video or audio tapes, or specimens) are called "records."

The FOS Records Committee (FOSRC) revised the list of birds for which they require documentation in 1996 (*FFN* 24(4):132-133). These species are marked in this report with an asterisk (*) to alert the observers of their need to supply the FOSRC with details of their sightings. (Some reports that lack documentation may have been omitted from this report).

A county designation (in italics) accompanies the first-time listing of each site in this report; further listings of the same site lack the county name. Abbreviations used are as follows: ABS = Archbold Biological Station (*Highlands*), APAFR = Avon Park Air Force Range, BCCP = Brooker Creek County Preserve (*Pinellas*), CP = county park, DTNP = Dry Tortugas NP (*Monroe*), ENP = Everglades NP, FBR = Florida Birding Report (*fide* Dotty Hull), FDCP = Fort DeSoto CP (*Pinellas*), FWBSTF = Fort Walton Beach STF (*Okaloosa*), HISRA = Honeymoon Island SRA (*Pinellas*), NP = national park, NWR = national wildlife refuge, PPSP = Paynes Prairie State Preserve (*Alachua*), R&W 1992 = Robertson and Woolfenden 1992, S&A 1994 = Stevenson and Anderson 1994, SMNWR = St. Marks NWR (*Wakulla*), SP = state park, SRA = state recreation area, SRSTF = Springhill Road STF (*Leon*), STF = sewage treatment facility, WICP = Weedon Island County Preserve (*Pinellas*), WMA = wildlife management area, WSSP = Wekiwa Springs SP (*Orange*), and N, S, E, W, etc. for compass directions. Bold-faced species, if any, denote birds newly reported or verified in Florida.

R&W 1992 and S&A 1994 were used to determine the regional and seasonal status of many species. Todd Engstrom assisted with the editing of the manuscript. With this report, the FOC welcomes Bob Duncan of Gulf Breeze as its third new recent member.

SUMMARY OF THE SPRING SEASON

Weather conditions this spring created fall outs in most parts of the state. Numerous fronts associated with fall outs were noted, but by far the most important occurred in the latter half of April. On 23 April, Wilfred Yusek noted a huge fallout at Honeymoon Island SRA just ahead of a mid-morning front. Amazing numbers of many migrants were counted after the rain ended. At Fort DeSoto CP on 26 April, 21 species of warblers, including Blue–winged, Golden–winged, Black–throated Green, and Kentucky, were observed by Paul Fellers et al. Unprecedented occurrences of Dickcissels along the Gulf Coast included the 5 highest Florida counts, the latest spring report, and two new county reports. Wilson's Phalaropes were likewise reported widely and in record numbers.

On 12 April, Naples was hit by a storm from the SSW that contained gusts up to 64 kph. The next day, Ted Below and others found 75 carcasses of 12 birds (Great Egret, Snowy Egret, Green Heron, Sora, Purple Gallinule, Common Moorhen, Western Sandpiper, Short–billed Dowitcher, Ring–billed Gull, Black Skimmer, Chuck–will's–widow, and Gray Catbird. Analysis of some of the birds indicated they died from "what appeared to be collision," causing T. Below to suspect they were caught in a wind-shear.

FOSRC rarities reported this spring were the Red–billed Tropicbird west of Key West, the White–faced Ibis at St. Marks NWR, the Bicknell's Thrush at Dry Tortugas NP, and Warbling Vireos at 4 sites. Other rarities included 2 Pacific Loons at Pensacola, the White–crowned Pigeon at Fort Walton Beach, single Lesser Nighthawks at 2 sites in the W Panhandle, the Key West Quail–Dove at Elliott Key, 2 La Sagra's Flycatchers each at Key Largo and Hugh Taylor Birch SRA, the Black–headed Grosbeak at Gulf Breeze, and the Snow Bunting that wintered at Canaveral National Seashore.

SPECIES ACCOUNTS

PACIFIC LOON: 2 that wintered in Pensacola Bay (*Escambia* and *Santa Rosa*) were seen last on 22 Apr (B. and L. Duncan et al.); 1 at St. George Island (*Franklin*) 23 Apr (J. Cavanagh, details and photos to FOS Archives).

COMMON LOON: 1 in breeding plumage at Newnans Lake (*Alachua*) 21 May (R. Rowan).

HORNED GREBE: 2 in breeding plumage at Lake Talquin (*Leon*) 2-8 May (H. Bolte).

EARED GREBE: 1 at Black Point CP, Homestead (*Dade*) 23 Mar (R. Halpin).

CORY'S SHEARWATER: 1 from shore at St. Augustine (*St. Johns*) 20 Mar (T. Taylor, D. Whitehead).

SOOTY SHEARWATER: 1 from shore at St. Augustine 20 Mar (T. Taylor, D. Whitehead).

WILSON'S STORM–PETREL: 2 birds 35 km off Port Canaveral (*Brevard*) 18 May (Alachua Aud. Soc.).

LEACH'S STORM–PETREL: 1 bird 35 km off Port Canaveral 18 May (Alachua Aud. Soc.).

*RED–BILLED TROPICBIRD: 1 midway between DTNP and Key West (*Monroe*) 19 Apr (H. Langridge et al.).

BROWN BOOBY: 36 at DTNP 23 Apr (S. Mlodinow, C. Hood, P. Lehman).

NORTHERN GANNET: 1 between DTNP and Key West 5 May (W. Biggs et al.).

AMERICAN WHITE PELICAN: 200+ migrating W at Niceville (*Okaloosa*) 2 Mar (R. Reilly), and 100 there 3 Mar (D. Ware); 1300 at PPM 17 Mar (P. Fellers); 135 in 4 flocks migrating W along the *Dixie* coast 27 Mar (P. Sykes, C. Kepler).

BROWN PELICAN: 1 immature at Orange Lake (*Alachua*) 19 Mar (J. Krummrich); 3 at Lake Kissimmee (*Osceola*) 5 Apr (T. Palmer); 1 immature at Lake Istokpoga (*Highlands*) 20 Apr (M. McMillian, S. McGehee et al.); 1 adult at Newnans Lake 26 Apr (A. Farkash); 1 at Saddle Creek CP (*Polk*) 27 Apr (P. Fellers); 3 N of Mulberry (*Polk*) 30 Apr (J. Jackson).

DOUBLE–CRESTED CORMORANT: 6 nests at Orange Lake 2 Apr (M. Meisenburg, T. Doonan) were the first for *Alachua* since 1974 (*fide* R. Rowan).

MAGNIFICENT FRIGATEBIRD: 2 immatures at St. Andrew SRA (*Bay*) 6 Apr (B. Straub).

GREAT BLUE HERON: 3 active nests in S *Dixie* 27 Mar (P. Sykes, C. Kepler) were the first breeding report for the county (!) (S&A 1994:55).

GREEN HERON: 8 dead on sandbars off Marco Island (*Collier*) 28 Mar-12 Apr (T. Below).

WHITE SPOONBILL: 1 at McKay Bay (*Hillsborough*) 18 May (S. Backes).

ROSEATE SPOONBILL: 6 at *Polk* phosphate mines 14 May (P. Fellers).

*WHITE–FACED IBIS: 1 photographed at SMNWR 10 May (*fide* R. West).

GLOSSY IBIS: 1 in breeding plumage at FWBSTF 30 Apr-5 May (E. Case, C. Henning, B. Duncan).

PRESUMED WHITE × SCARLET IBIS HYBRID: 1 pink bird at Eco Pond, ENP (*Monroe*) 5 Apr (B. Pranty, Martin Co. Aud. Soc.).

BLACK–BELLIED WHISTLING–DUCK: 1 standing in the median of Gandy Boulevard ca. 250 m W of Tampa Bay (*Pinellas*) 29 Apr was the second county report (J. and L. Hopkins et al.); 7 at Gainesville 13 May (D. and L. O'Neill et al.) were the first for *Alachua* (S&A 1994:96); 10 at Myakka River SP (*Sarasota*) 25 May (D. and H. Hull et al.).

BLACK SWAN: 1 at Shell Key (*Pinellas*) 17 Mar (B. Isaacson) may be the same bird seen at FDCP on 6 Feb 1995.

CANADA GOOSE: 26 at Lake Denton, Avon Park (*Highlands*) 1 Apr (C. Ford), and 11 nearby 11 Apr (*fide* D. Ford) were thought to be wild, and were the first county reports (S&A 1994:102); 1 pair with 3 young at Air Products Sanctuary, Pace (*Santa Rosa*) 20 May (B. Milmore).

CINNAMON TEAL: 1 in central *Brevard* 9 Feb-8 Mar (R. Halpin).

NORTHERN SHOVELER: 1 at Marco Island 12 Apr (J. and L. Douglas).

REDHEAD: 1 at BCCP 17 May (A. and R. Smith) was late (S&A 1994:124).

RING–NECKED DUCK: 1 at Tierra Verde (*Pinellas*) 10 May (R. Smith) was late (S&A 1994:125).

GREATER SCAUP: 1 male at Tram Road STF (*Leon*) 5 Apr (B. Bergstrom, K. Avera, J. Baxter).

LESSER SCAUP: 1 female at SMNWR 19 May (J. Dozier); 2 at St. Petersburg (*Pinellas*) 25 May (A. and R. Smith); 1 at Hernando Beach (*Hernando*) 31 May (C. Black).

OLDSQUAW: 1 female at FWBSTF 3 Mar-7 May (D. Ware, B. Duncan et al.); 1 at Bear Lake (*Santa Rosa*) 4 Mar (R. Bonwit, P. Tetlow et al.); 1 at HISRA 18 Apr (W. Yusek).

WHITE–WINGED SCOTER: 5 at St. George Island SP (*Franklin*) 21 Apr (R. Christen et al.); 40 others in *Franklin* 21 Apr (T. Engstrom); 10 E of Fort Walton Beach 11 May (D. Ware, L. Fennimore).

RUDDY DUCK: 1 at SRSTF 3 May (D. Harder, G. Menk).

SWALLOW–TAILED KITE: 18 at Pensacola (*Escambia*) 19 Mar (P. Parrish).

WHITE–TAILED KITE: 1 adult at ABS 9 Mar (A. and R. Smith) was the fourth Station report (*fide* B. Pranty); 1 adult at Placid Lakes Estates (*Highlands*) 15 Mar (C. Adkisson); 2 at Chekika, ENP (*Dade*) 15 Mar (V. McGrath); 1 at APAFR (*Polk*) 30 May (N. Hamel, A. Mains).

MISSISSIPPI KITE: 1 at Gainesville 25 Mar (D. Levey); 200 at Tram Road STF 4 Apr (K. MacVicar), 100 on 19 Apr (R. West et al.), and 62 on 1 May (G. Menk, J. Cavanagh).

NORTHERN HARRIER: 1 female at Kissimmee Prairie State Preserve (*Okeechobee*) 18 May (T. Dean).

SHARP–SHINNED HAWK: 1 at Piney Z Lake (*Leon*) 2 May (D. Harder).

COOPER'S HAWK: 1 at Corkscrew Swamp Sanctuary (*Collier*) 20 Apr (D. Weeks).

BROAD–WINGED HAWK: 1 at PPSP 20 Mar (A. Farkash, B. Muschlitz).

SHORT–TAILED HAWK: 1 dark morph at Disney Wilderness Preserve (*Osceola* or *Polk*) 2 Mar (P. Fellers); 3 dark morph adults had returned to their nesting site near Lake Istokpoga by 9 Mar (M. McMillian, S. McGehee); 1 at Lake Placid (*Highlands*) 16 Mar (A. Fleischer, K. Tarvin); 1 pair near Suwannee (*Dixie*) 26 Mar, 1 pair and 1 dark morph near Fowlers Bluff (*Levy*) 27 Mar, and 1 dark morph at Sanders Creek (*Dixie*) 27 Mar (all P. Sykes, C. Kepler); 1 dark morph at ENP Visitor Center 4 May (W. Biggs et al.); 1 dark morph near West Lake, ENP (*Dade* and/or *Monroe*) 4 May (S. Rowe et al.); 1 light morph at Marathon (*Monroe*) 5 May (S. Rowe et al.); 1 at Saddle Creek CP (*Polk*) 13 May (P. Fellers); 1 over Cedar Key Scrub State Reserve (*Levy*) 25 May (T. Webber); 1 dark morph at WSSP 25 May (S. Belson).

GOLDEN EAGLE: 1 immature in E *Bay* 7 Apr (A. and R. Ingram).

MERLIN: 1 at FDCP 13 Apr ate a Blue Grosbeak (L. Atherton et al.).

PEREGRINE FALCON: 2 over ABS 13 Mar (G. Woolfenden, R. Risch); 1 adult flying N over Seahorse Key, Cedar Keys NWR (*Levy*) 28 Mar (P. Sykes et al.); 1 over Watermelon Pond (*Alachua*) 24 Apr (B. Muschlitz); 1 at SMNWR 1 May (J. Dozier); 1 at SRSTF 3 May (D. Harder, G. Menk).

YELLOW RAIL: 1 at SMNWR 31 Mar (B. Henderson, D. Wells) and 5 Apr (K. Avera, J. Baxter, B. Bergstrom).

BLACK RAIL: 1 calling at Amelia Island (*Nassau*) 12-16 Mar (C. Wyatt) was the first county report (S&A 1994:189); 1 at Tomoka Aquatic Preserve (*Volusia*) 22 May (D. Shelley).

SORA: 1 in a tree at FDCP 26 Apr (Lake Region Aud. Soc.); 1 at *Hamilton* phosphate mine 10 May (J. Krummrich).

PURPLE GALLINULE: 1 arrival at Tall Timbers Research Station (*Leon*) 20 Mar (R. West); 1 adult at HISRA 19 Apr (W. Yusek) may be the first park report.

COMMON MOORHEN: 1 found dead at DTNP 6 Apr (W. Biggs et al.).

AMERICAN COOT: 1 found dead at DTNP 6 Apr (W. Biggs et al.).

WHOOPING CRANE: 2 over SR-26 Melrose (*Alachua*) 9-10 Apr (B. Bolte); 1 flying N over US-19 (*Hernando*) near the *Citrus* border ca. late Apr (D. Blewett).

AMERICAN GOLDEN–PLOVER: 3 at FDCP 27 Mar-2 Apr (R. Webb, L. and R. Smith).

SEMIPALMATED PLOVER: 1 at Kanapaha STF (*Alachua*) 24 Apr (J. Hintermister); 8 at SRSTF 3 May (G. Menk, D. Harder); 2 at *Hamilton* phosphate mine 10 May (J. Krummrich) were the first county report (S&A 1994:216); 1 at WSSP 10 May (E. Egensteiner, S. Belson) was new for the Wekiva Basin (*fide* P. Small).

AMERICAN AVOCET: 20 at Pensacola 25-26 Apr (A. and D. Forster) were "very rare" (B. Duncan); 26 at HISRA 26 Apr following a weather front (W. Yusek); 2 in breeding plumage at SMNWR 4-27 May (B. and B. Scott, G. Menk et al.); 3 at *Hamilton* phosphate mine 10 May (J. Krummrich); 35 at PPM 14 May (P. Fellers); 3 in breeding plumage at McKay Bay 18 May (S. Backes).

SOLITARY SANDPIPER: 1 at SRSTF 11 Mar (G. Menk); 1 at FDCP 31 Mar (L. and R. Smith et al.) and 40 there 26 Apr (L. Atherton)—10 others flew in from over the Gulf at 1900 hrs (P. Fellers); 14 at Hague Dairy (*Alachua*) 23 Apr (M. Manetz); 19 at Kanapaha STF 23 Apr (R. Rowan); 12 at WICP 11 May (A. and R. Smith).

SPOTTED SANDPIPER: 15 at Hague Dairy 23 Apr (M. Manetz); 50 at Newnans Lake 12 May (A. Kent).

UPLAND SANDPIPER: 1 at FDCP 31 Mar (V. Morrison, M. Wilkinson et al.); 1 at SRSTF 6 Apr (B. Henderson); 2 at Fort Myers (*Lee*) 12-13 Apr (V. McGrath); 1 at Hague Dairy 23 Apr (M. Manetz); 1 in *Wakulla* 24 Apr (J. Dozier); 1 at Mashes Point CP (*Wakulla*) 6 May (J. Dozier, R. West).

WHIMBREL: 1 at the *Wakulla* Airport 1 May (J. Dozier); 7 at SMNWR 11 May, and 3 there 27 May (G. Menk); 8 at Air Products Sanctuary 15 May (B. Milmore).

MARBLED GODWIT: 1 at Pensacola 25 Apr (A. and D. Forster) was "very rare" (B. Duncan).

LEAST SANDPIPER: 2200 at PPM 2 Mar (P. Fellers).

WHITE–RUMPED SANDPIPER: 1 at FWBSTF 14 Apr was early in the region by 3 days (B. Duncan); several in *Pinellas* 23 Apr-29 May (*fide* R. Smith); 1 at *Okaloosa* holding ponds 29 Apr (D. Ware); 3 at PPM 3 May (C. Geanangel, P. Timmer); 1 at *Hamilton* phosphate mine 10 May (J. Krummrich); 1 at the *Brevard* STF on Wickham Road 18 May (*fide* FBR).

BAIRD'S SANDPIPER: 1 at DTNP 30 Apr-1 May (T. Tobkin, W. Biggs et al.); 4 at *Okaloosa* holding ponds 30 Apr, with birds "still passing through" 20 May (D. Ware); 1 at SRSTF 2 May (J. Cavanagh).

PECTORAL SANDPIPER: 14 at Air Products Sanctuary 25 Mar (B. Milmore); 6 at WICP 27 Apr (A. and R. Smith et al.).

PURPLE SANDPIPER: 1 at Big Pine Key (*Monroe*) 21 Apr (S. Mlodinow, C. Hood, P. Lehman).

DUNLIN: 1 at PPM 3 May (C. Geanangel, P. Timmer).

STILT SANDPIPER: 185 at PPM 17 Mar (P. Fellers); 1 at SRSTF 19 Mar (J. Cavanagh); 1 at FDCP 23 Apr (B. Atherton) and 2 others there 26 Apr (L. Atherton); 54 at Mayport (*Duval*) 23 Apr (N. Wamer); 35 at *Hamilton* phosphate mine 10 May (J. Krummrich).

BUFF–BREASTED SANDPIPER: 4 at FDCP 23 Apr (A. and R. Smith et al.); 15-20 at FWBSTF 29 Apr (L. Bogaiges, P. Blakeburn, D. Ware).

RUFF: 1 Reeve at the *Brevard* STF on Wickham Road 6 May (D. Severn, J. Taylor).

SHORT–BILLED DOWITCHER: 238 at PPM 17 Mar (P. Fellers).

COMMON SNIPE: 1 at APAFR (*Polk*) 5 May (B. Pranty).

WILSON'S PHALAROPE: 1 at SRSTF (*Leon*) 25 Apr (J. Cavanagh) had increased to 4 by 2 May (G. Menk et al.); 1 at Phipps Point (*Franklin*) 28 Apr (D. Bryan); 16 at *Okaloosa* holding ponds 29 Apr (D. Ware); **150-200** at SMNWR 29 Apr (J. Dozier et al.); 3 *Pinellas* reports were the first in at least 10 years: 1 male at Palm Harbor STF 9-11 May (R. Smith et al.), 1 male at WICP 11 May (A. and R. Smith), and 1 at St. Petersburg 17 May (A. and R. Smith).

PARASITIC JAEGER: 1 at Garden Key, DTNP 23 Apr (S. Mlodinow, C. Hood).

FRANKLIN'S GULL: 1 in breeding plumage at Newnans Lake 5-11 May (R. Rowan [photos] et al.). was the first *Alachua* report, and the latest in spring (S&A 1994:272).

BONAPARTE'S GULL: 1 first-year bird at Fort Pierce Inlet SRA (*St. Lucie*) 5 Apr (J. Brooks); 1 at *Hamilton* phosphate mine 10 May (J. Krummrich).

HERRING GULL: 1 immature at Newnans Lake 21 May (R. Rowan).

LESSER BLACK–BACKED GULL: 3 at Fort Myers Beach (*Lee*) 12 Apr (N. Pettis); 2 at Boca Chica Key (*Monroe*) 25 Apr (S. Mlodinow, C. Hood, P. Lehman).

GULL–BILLED TERN: 4 at SMNWR 24 Apr (J. Reinman); 1 at PPM 3 May (C. Geanangel, P. Timmer).

CASPIAN TERN: 15 at Lake Istokpoga 20 Apr (M. McMillian, S, McGehee); "a good number" of adults "giving fish to one another" at M&K Ranch (*Gulf*) 3 May (E. Fontaine, J. Richardson, T. Menart); 1 at *Hamilton* phosphate mine 10 May (J. Krummrich); 1 at Orange Lake 12 May (G. Gottlieb).

COMMON TERN: 1 first-year bird at Orange Lake 2 May (R. Rowan).

ARCTIC TERN: 1 adult female found injured in Fort Lauderdale (*Broward*) 7 May died later that day (*fide* W. George, specimen to Univ. of Central Florida).

FORSTER'S TERN: 2-3 at Orange Lake 20 May (R. Rowan).

LEAST TERN: 1 at SRSTF 7 Apr (D. Harder); 1 at Key West (*Monroe*) 11 Apr (J. Ondrejko).

BRIDLED TERN: 1 found injured at Pass-A-Grille Beach (*Pinellas*) 13 Mar was released in Apr (*fide* R. Smith).

BLACK TERN: 1 at Cedar Key 23 Apr (D. Wenny, S. Duncan); 6 at Canaveral National Seashore (*Brevard*) 25 Apr (T. Palmer); 4 at SMNWR 30 Apr (A. and D. Morrow); 1 at M&K Ranch 3 May (J. Richardson, T. Menart); 1 at *Hamilton* phosphate mine 10 May (J. Krummrich); "several" at *Brevard* STF on Wickham Road 22 May (*fide* FBR).

BLACK NODDY: 7 at DTNP this season, with 5 seen at once (W. Biggs et al.).

BLACK SKIMMER: 1500 at Shell Mound, Lower Suwannee NWR (*Levy*) 11 Mar (P. Sykes); 10 at Lake Kissimmee (*Osceola*) 5 Apr (T. Palmer).

WHITE–CROWNED PIGEON: 1 at Fort Walton Beach (*Okaloosa*) 16 Apr-11 May (B. Fleck, C. King, D. Ware, details to FOSRC) See Florida Field Naturalist this issue.

EURASIAN COLLARED–DOVE: 6 near Oxford (*Sumter*) 30 Apr (C. Black) were the first county report (S&A 1994:321); 1 in *Gadsden* 30 May (G. Menk, T. Engstrom).

WHITE–WINGED DOVE: 1 singing at Alligator Point (*Franklin*) 7 May (J. Dozier).

KEY WEST QUAIL–DOVE: 1 at Elliott Key, Biscayne NP (*Dade*) 4 May (B. Dusek, details to FOSRC).

MONK PARAKEET: 1 pair nested at a Lakeland (*Polk*) golf course 20 Mar (T. Palmer).

BLACK–BILLED CUCKOO: 2 at Cedar Key 28 Apr (B. Roberts); 1 at Tallahassee (*Leon*) 1 May (G. Menk).

YELLOW-BILLED CUCKOO: singles at PPSP 20 Mar (M. Landsman) and Cedar Key 23 Mar (D. Steadman) were early (S&A 1994:352); 100s at Cedar Key 28 Apr (D. Henderson).

SHORT-EARED OWL: 3 *Pinellas* reports: 2 at Shell Key 2 Mar (P. Blair, W. Yusek et al.), 1 dead there 16 Mar (L. Bielsa, head to ABS), and 1 at Sawgrass Lake CP 18 Mar (W. Yusek); 1 at DTNP 6-8 May (D. Goodwin et al.).

LESSER NIGHTHAWK: 1 at Destin 10 May (E. Case, J. French, P. Berry); 1 male at Gulf Breeze 10 May (B. and L. Duncan).

CHUCK-WILL'S-WIDOW: 1 in *Alachua* 1 Mar (J. Weimer); 2 singles in *Highlands* 2 Mar (F. Lohrer, R. Bowman); 7 dead on sandbars off Marco Island 8 Mar-12 Apr included 2 with single birds (1 a Palm Warbler) in their stomachs (T. and V. Below).

WHIP-POOR-WILL: 1 singing at Key West 11 Mar (J. Ondrejko); 1 dead on a sandbar off Marco Island 13 Mar (T. and V. Below).

CHIMNEY SWIFT: 1 at Tallahassee 19 Mar (F. Rutkovsky); 1 over Lower Suwannee NWR 25 Mar (P. Sykes).

BLACK-CHINNED HUMMINGBIRD: 1 adult male at Fort Clinch SP (*Nassau*) 3-6 Apr (R. Pollack) was new for the county (S&A 1994:388).

SELASPHORUS SPECIES: 3 presumed Rufous Hummingbirds remained at 3 Tallahassee feeders to 5 Mar (J. Safold), 8 Mar (J. O'Malley), and 15 Mar (R. Leach).

RUFOUS HUMMINGBIRD: 1 at Gainesville through 13 Mar (B. Roberts).

RED-BELLIED WOODPECKER: 1 at Cedar Key 20 Apr cached a tree-frog (*Hyla* spp.) in a pine and "hammer[ed] it to death" (R. Rowan et al.).

PILEATED WOODPECKER: 1 at HISRA 12 Apr (W. Yusek) was the first park report (*fide* R. Smith); 1 at FDCP 22 Apr (D. and P. Fellers).

OLIVE-SIDED FLYCATCHER: 1 at South Miami (*Dade*) 17 Apr (D. Lysinger).

EASTERN WOOD-PEWEE: 1 singing at Key West 27-30 Apr (J. Ondrejko).

YELLOW-BELLIED FLYCATCHER: 1 at FDCP 26 Apr (L. Atherton et al.).

ACADIAN FLYCATCHER: 1 at San Felasco Hammock (*Alachua*) 13 Apr (H. Adams, G. McDermott).

ASH-THROATED FLYCATCHER: 1 at the *Okaloosa* landfill 5 Dec-14 Apr (B. Duncan, D. Ware et al.).

GREAT CRESTED FLYCATCHER: singles at Camp Blanding Military Reservation (*Clay*) 11 Mar (K. Miller) and Gainesville 14 Mar (G. McDermott) were early (S&A 1994:425).

LA SAGRA'S FLYCATCHER: 2 at Key Largo (*Monroe*) 5-13 Apr (L. Manfredi, W. Biggs et al.); 1 at Hugh Taylor Birch SRA (*Broward*) 27 Apr, and 2 there 29-30 Apr (both W. George, J. Baker, J. DiPasquale et al.).

WESTERN KINGBIRD: 1 at FWBSTF 16 Apr (P. Blakeburn); 1 inland from Cedar Key 19-23 Apr (D Wenny); 2 at FDCP 29 Apr and 4 there 1-3 May (both M. Wilkinson et al.); 1 at SMNWR 29 Apr-5 May (J. Dozier); 6 at Gulf Breeze 29 Apr (J. Peaden, J. Stevens) and 2 there 30 Apr (B. Duncan); 2 at *Okaloosa* holding ponds 30 Apr (D. Ware, B. Duncan); 1 at Destin 10 May (E. Case).

EASTERN KINGBIRD: 3 at St. George Island 23 Mar (G. Menk, L. Paugh, K. Weusing); 1 at Buck Island Ranch 23 Mar (M. McMillian); 1 SW of Cross City (*Dixie*) 27 Mar (P. Sykes).

GRAY KINGBIRD: 1 at ABS 26 Apr (K. Tarvin, H. Ellis); 2 *Alachua* reports: 1 at Gainesville 28 Apr (R. Rowan) and 1 at PPSP 1-4 May (B. Roberts).

SCISSOR-TAILED FLYCATCHER: 1 at Destin (*Okaloosa*) 3 Apr (D. Ware); singles in *Franklin* 17 Apr (J. Epler), 26 Apr (J. Hintermister, D. Morrow), and 29 Apr (J. Cavanagh); 1 at Bartow (*Polk*) 23 Mar (B. Bratlie).

TREE SWALLOW: 1 moving N over the Green Swamp (*Polk*) 29 May (P. Fellers, S. Riffe).

NORTHERN ROUGH-WINGED SWALLOW: 5-6 at Zephyrhills (*Pasco*) 6 Mar, included 1 that investigated a spoil pile, possibly as a nesting site (D. Robinson); 2 at Panacea (*Wakulla*) 7 Mar (J. Dozier).

BANK SWALLOW: 2 at Kanapaha STF 23 Apr (G. McDermott, R. Rowan); 1 at SMNWR 17 May (J. Dozier).

CLIFF SWALLOW: 1 at FDCP 24 Apr (L. Atherton et al.).

CAVE SWALLOW: 1 at Garden Key, DTNP 23 Apr (S. Mlodinow, C. Hood); 2 at Key West 22 May (J. Ondrejko).

BARN SWALLOW: 6 at Suwannee 26 Mar (P. Sykes, C. Kepler); 2 birds 35 km off Port Canaveral 18 May (Alachua Aud. Soc.); 3 at Kissimmee Prairie Sanctuary (*Okeechobee*) 27 May (M. Scheuerell).

SEDGE WREN: 1 at PPSP 3 May (M. Landsman); 1 at *Hamilton* phosphate mine 10 May (J. Krummrich); 2 singing in dry prairie at APAFR (*Highlands*) 30 May (B. Pranty) tied the latest spring reports (S&A 1994:484).

RUBY–CROWNED KINGLET: 1 at DTNP 9 Apr (M. Manetz et al.) was thought to be the first spring report from the park (W. Biggs).

BLUE–GRAY GNATCATCHER: 3 nestlings in a nest in a pine at Disney Wilderness Preserve 29 Mar (Lake Region Aud. Soc.) was the earliest breeding report in Florida (S&A 1994:491).

VEERY: 1 [without details] at WSSP 8 Mar (*fide* P. Small) was the earliest spring report by >3 weeks (S&A 1994:495); 25 at HISRA 23 Apr (W. Yusek); 16 at FDCP 26 Apr (Lake Region Aud. Soc.); 5 at San Felasco Hammock 27 Apr (M. Manetz) were only the fourth *Alachua* spring report (*fide* R. Rowan).

"GRAY–CHEEKED" THRUSH: 250 "Gray-cheeked" and Swainson's thrushes at HISRA 23 Apr (W. Yusek) probably included the highest counts of "both" species (S&A 1994:497-498); an "unprecedented fallout" at Casey Key (*Sarasota*) the night of 23-24 Apr, with 22 birds banded on 24 Apr; 1 bird was recaptured 25, 27, 28, and 30 Apr (A. Stedman).

*BICKNELL'S THRUSH: 1 (smaller size noted) in direct comparison with Gray-cheeked Thrushes at DTNP 6 May (W. Biggs).

HERMIT THRUSH: 1 at WSSP 10 May (L. Malo) was very late (S&A 1994:499).

WOOD THRUSH: 30 at HISRA 23 Apr (W. Yusek).

AMERICAN ROBIN: 1 at DTNP 19 Apr (W. Meier, H. Langridge et al.); 1 at Lake Alfred (*Polk*) 3 May (C. Geanangel); 1 at Kelly Park (*Orange*) 13 May (P. Small).

GRAY CATBIRD: 45 at Fort Pierce Inlet SRA 24 Apr (J. Brooks); 1 at WSSP 12 May (S. Belson).

NORTHERN MOCKINGBIRD: presumably the same (unbanded) pair at APAFR (*Polk*) produced 3 successful clutches, which fledged by 4 Apr, 17 May, and 9 Jun; the distance from the 2 outer nests was ca. 23 m (B. Pranty).

BAHAMA MOCKINGBIRD: 1 at Birch SRA 11-12 May (W. Wilson, W. George, T. Hendrickson).

CEDAR WAXWING: 225 at BCCP 9 May (R. Smith); 10 over Gainesville 26 May (R. Rowan).

LOGGERHEAD SHRIKE: 1 at Cedar Key 6 Apr was the observer's first sighting there in 13 years (D. Henderson).

COMMON MYNA: "several" at Marathon (*Monroe*) 21-25 Apr (S. Mlodinow) were the first county reports (S&A 1994:523); 2 adults and 2 nestlings in the Food Lion sign at Fort Pierce (*St. Lucie*) 31 May was the first county report (J. Brooks).

BELL'S VIREO: 1 at SCCP 13 May (P. Fellers, details to FOC) was the latest spring report (S&A 1994:529).

BLUE–HEADED VIREO: 1 at SCCP 27 Apr (P. Fellers).

YELLOW–THROATED VIREO: 1 singing at Gainesville 4 Mar (B. Roberts); 9 at WSSP 8 Mar (group survey *fide* P. Small).

*WARBLING VIREO: 1 singing at Gulf Breeze (*Santa Rosa*) 20 Apr (L. Duncan); 1 at Cedar Key 20 Apr (G. McDermott, details to FOSRC); 1 at Lighthouse Park, Sanibel Island (*Lee*) 1 May (S. Rowe et al.); 1 at Niceville 10 May (L. Mackey, details to FOSRC) was the latest in spring (S&A 1994:533).

RED-EYED VIREO: 15 at SCCP 24 Mar (P. Fellers).

BLACK-WHISKERED VIREO: 1 at SMNWR 4 May (B. and B. Scott); 1 at Gulf Breeze 7 May (B. Duncan); 2 singing "on territory" at HISRA 9 May (R. Smith); 1 at Destin 11 May (L. Fennimore. D. Ware) was the first *Okaloosa* report (S&A 1994:537).

GOLDEN-WINGED WARBLER: 1 at Cedar Key 20 Apr (L. Santisteban); 2 each at FDCP 24 Apr and 27 Apr (both L. Atherton et al.).

NASHVILLE WARBLER: 1 at Birch SRA 23 Mar (W. George); 1 at Mysterious Waters (*Wakulla*) 12 Apr (J. Epler).

NORTHERN PARULA: 126 at WSSP 8 Mar (group survey *fide* P. Small).

MAGNOLIA WARBLER: singles in *Polk* 17 Apr (P. Fellers), 27 Apr (T. Palmer), and 12 May (P. Fellers).

CAPE MAY WARBLER: 1 at Newnans Lake, Gainesville 28 Mar (G. McDermott).

YELLOW-RUMPED WARBLER: 1 male at ABS 17 May (R. Risch) was late (S&A 1994:556).

BLACKBURNIAN WARBLER: 1 at SMNWR 19 Apr (G. Sprandel); 3 *Pinellas* reports 26 Apr, 4 May, 12 May (*fide* M. Wilkinson, R. Smith, J. Fisher).

PINE WARBLER: 1 at DTNP 9 Apr (M. Manetz et al.).

BAY-BREASTED WARBLER: singles at SMNWR 12 Apr (A. Gantzhorn, F. Leonard) and 22 Apr (D. Morrow)—the former report is the earliest in spring (S&A 1994:571-572); 1 at St. Joseph Peninsula SP (*Gulf*) 23 Apr (J. Richardson, A. and R. Ingram); 1 at San Felasco Hammock 27 Apr (M. Manetz); 1 male at Birch SRA 27 Apr (J. Baker, J. Di-Pasquale); 2 at Cedar Key 28 Apr (D. Henderson).

BLACKPOLL WARBLER: 2 at the Peace River (*Polk*) 16 Mar (C. Geanangel, P. Timmer) were the earliest spring report (S&A 1994:573).

PROTHONOTARY WARBLER: 1 at Lower Suwannee NWR 27 Mar (P. Sykes).

WORM-EATING WARBLER: this spring was the best season "in recent memory" for the species in *Pinellas*, with 1 at FDCP 23 Mar (B. and M. Hoffman), 6 countywide on 12 Apr (*fide* R. Smith), and 8 at Bonner Park 16 Apr (J. Fisher); 7 at Hugh Birch SRA 20 Apr (S. Mlodinow, C. Hood); 1 in NE *Leon* 29 Apr (D. and K. MacVicar).

SWAINSON'S WARBLER: 1 at Mysterious Waters 26 Mar and 4 there 30 Mar (both J. Epler); 4 in Leon 10 Apr (D. Harder); singles at Birch SRA 12, 14, 15, 16, 20, and 22 Apr (W. George); 12 in *Pinellas* this season (*fide* R. Smith), with 5 at Bonner Park 16 Apr (J. Fisher); 1 at Cedar Key 5 Apr (B. Roberts); 1 at Big Shoals State Forest (*Hamilton*) 10 May (J. Krummrich).

OVENBIRD: 1 singing in SE *Leon* 3-4 Apr (D. Evered, L. Messick).

NORTHERN WATERTHRUSH: 2 at WSSP 8 Mar (*fide* P. Small).

LOUISIANA WATERTHRUSH: 1 at WSSP 8 Mar (*fide* P. Small).

KENTUCKY WARBLER: 1 at Mysterious Waters 26 Mar (J. Epler); 5 at FDCP 13 Apr (L. Atherton, M. Wilkinson et al.).

CONNECTICUT WARBLER: singles banded at Casey Key 3 and 25 May (A. Stedman); 1 at DTNP 7 May (W. Biggs, R. French); 1 at O'Leno SP (*Alachua*) 10 May (C. Parenteau); 2 at Elliott Key 11 May, and 1 there 25 May (both B. Dusek); singles in *Broward* 13 May at Birch SRA (W. George) and John U. Lloyd SRA (J. Baker); 1 at Fort Pickens (*Escambia*) 14 May (E. Case) was the sixth regional report (*fide* B. Duncan); 2 at Bonner Park 17 May (K. Nelson, J. Fisher).

COMMON YELLOWTHROAT: 1 female at Key West to 28 May (J. Ondrejko).

HOODED WARBLER: 1 at Mysterious Waters 18 Mar (J. Epler).

YELLOW-BREASTED CHAT: 7 singing at Cedar Key Scrub State Reserve Apr-May (T. Webber); 3-4 singing at PPSP 1 May through the period (R. Rowan).

STRIPE-HEADED TANAGER: 1 female at Kendall (*Dade*) 11-13 Apr (J. Rosenfield et al.); 1 male at Elliott Key 11 May (B. Dusek).

SUMMER TANAGER: 1 at Al-Bar Ranch (*Pasco*) 4 Mar (B. Pranty, S. Peacock) was the earliest spring report (S&A 1994:606); 2 at Lower Suwannee NWR 26 Mar (P. Sykes, C. Kepler).

Scarlet Tanager: 50 at HISRA 23 Apr (W. Yusek); 25 at FDCP 24 Apr were all gone the next day (L. Atherton et al.); 1 at Birch SRA 29 Apr (*fide* W. George).

Rose--breasted Grosbeak: a total of 17 at Gainesville variously between 16-30 Apr (*fide* R. Rowan); 100+ at HISRA 23 Apr (W. Yusek); 40+ at St. George Island 23 Apr (J. Cavanagh, S. Jue, K. NeSmith, T. Engstrom); 11 at a feeder in Baypoint (*Bay*) 26 Apr (T. Menart);1 female at Tallahassee 13 May (F. Rutkovsky).

Black–headed Grosbeak: 1 adult male at Gulf Breeze 30 Apr-4 May (G. Boyce, L. Bogaiges, P. Blakeburn) was the first regional spring report.

Blue Grosbeak: 1 male S of Old Town (*Dixie*) 27 Mar (P. Sykes); 2 pairs at BCCP 9 May (R. Smith).

Indigo Bunting: 60 at FDCP 14 Apr (A. and R. Smith, M. Wilkinson et al.).

Painted Bunting: 2 males at HISRA 12-20 Apr (W. Yusek, R. Webb); 3 females at St. George Island 23 Apr (J. Cavanagh, S. Jue, K. NeSmith); 2 singing and apparently on territory S of Gainesville 10-16 May (A. Kent, A. Farkash); 1 female or immature at Homestead (*Dade*) 18 May was "remarkably late" (P. W. and S. Smith).

Dickcissel: 2 at Gulf Breeze 22 Apr had increased to 25 on 30 Apr (both B. and L. Duncan); 8 at SMNWR 22 Apr (D. Morrow); **116** (an exact count) at FDCP 23 Apr (A. and R. Smith, B. and M. Hoffman [videotape]), and 75-100 other birds flying overhead there 26 Apr (L. Atherton); 50-60 at St. George Island 23 Apr (J. Cavanagh, S. Jue, K. NeSmith, T. Engstrom); 12 at Cedar Key 23 Apr (B. Muschlitz, M. Landsman); 8 at Garden Key, DTNP 24 Apr (S. Mlodinow, C. Hood, P. Lehman); 3 S of Steinhatchee (*Dixie*) 25 Apr (J. Hintermister); 1 at Lake City (*Columbia*) 28 Apr (J. Krummrich); 20 at FWBSTF 29 Apr (D. Ware); 1 at DTNP 25 May (B. Henderson, D. Wells).

Bachman's Sparrow: only 5 at BCCP, the last site in Pinellas that still supports this species (*fide* R. Smith).

Chipping Sparrow: 1 at Indigenous Park, Key West 21-25 Apr (S. Mlodinow, C. Hood, P. Lehman).

Clay--colored Sparrow: 1 at Fort George Island (*Duval*) 23 Apr (R. Clark).

Lark Sparrow: 1 at Pensacola Beach (*Escambia*) 17 Mar (P. Tetlow); 1 at Fort Pickens 18-25 Mar (B. Duncan, J. French, D. Russell); 1 at FDCP 21 Apr (*fide* R. Smith).

Grasshopper Sparrow: 2 at Soldier's Key, Biscayne NP 4 Apr (B. Dusek); 1 at Key West 16 Apr (J. Ondrejko); 1 at FDCP 22 Apr (D. and P. Fellers).

Florida Grasshopper Sparrow: 1 singing at River Ranch Acres (*Polk*) 15 May was a new site for this race (T. Dean).

Henslow's Sparrow: 1 at Eglin Air Force Base (*Walton*) 3 Mar (D. Ware, B. Reid); 1 at APAFR (*Highlands*) 9 Apr (B. Pranty); 1 singing at Kissimmee Prairie Sanctuary 9 May (M. Scheuerell) was the latest spring report (S&A 1994:641).

Le Conte's Sparrow: 1 at FWBSTF 14 Mar (E. Case).

Song Sparrow: 1 at HISRA 7 Apr (W. Yusek).

Snow Bunting: 1 at Canaveral National Seashore (*Brevard*) through 10 Mar (*fide* FBR).

Bobolink: 40 in central *Collier* 16 Apr (J. and L. Douglas); 75-100 over FDCP 26 Apr (L. Atherton); 80 at WICP 27 Apr (A. and R. Smith); 185 in *Hillsborough* 10 May (D. Bowman); 924 in *Alachua* 10 May (*fide* R. Rowan); 2500 in St. Petersburg 11 May (A. and R. Smith, B. Hoffman [videotape] et al.); 2 at Three Lakes WMA (*Osceola*) 23 May (M. Scheuerell).

Yellow–headed Blackbird: 1 at Ponce de Leon Park, Punta Gorda (*Charlotte*) 6 Mar (*fide* FBR); 2 males and 1 female at FWBSTF 29 Apr-1 May (D. Ware, L. Fennimore et al.); 1 immature male at Piney Z Lake 10 May (D. Harder) was the latest spring report (S&A 1994:670).

Shiny Cowbird: 30 at Rookery Bay Nat. Est. Res. Reserve (*Collier*) through late Mar (J. Hammond et al.); 1 male at Fort Pickens 12 Apr (E. Case, E. and H. Barbig); 1 male at Cedar Key 13 Apr (B. Roberts)-18 May (D. Henderson); 1 male singing in *Escambia* 21 Apr-20 May (G. Fleming); 7 (5 males) at Garden Key, DTNP 23 Apr (S. Mlodinow,

C. Hood, P. Lehman); 1 male at Gulf Breeze 28 Apr (B. Bremser); 23 at Key West 29 Apr and 25 there 2 May (both J. Ondrejko); 1 male displaying at ABS 13 May (G. Woolfenden); 1 at Bald Point (*Franklin*) 17 May (J. Dozier); 1 at Carrabelle (*Franklin*) 18 May (J. Dozier); 1 "pair" at Fort George Island 24 May, and 2 "pairs" there by 31 May (both R. Clark).

BRONZED COWBIRD: 1 male at SMNWR 20 Apr (G. Hunter, R. West, J. Brooks et al.).

BALTIMORE ORIOLE: 1 at St. George Island 10 May (D. and S. Jue).

BULLOCK'S ORIOLE: 1 female at Air Products Sanctuary 7 May (B. Milmore).

PURPLE FINCH: 12 at Tallahassee 17 Mar (F. Rutkovsky).

HOUSE FINCH: 1 pair (male carrying nesting material) in S Jacksonville (*Duval*) 7 Mar (R. Clark).

PINE SISKIN: absent in winter at Gainesville, but 1 at a feeder there 28 Feb-2 Mar (E. Perry); 3 at Tallahassee to 5 May (F. Rutkovsky).

AMERICAN GOLDFINCH: 1 partially leucistic male at a Gainesville feeder through 31 May (B. Muschlitz).

EVENING GROSBEAK: 1 at Gulf Breeze 22-23 Apr (P. Blakeburn, L. Bogaiges) was very rare in the region (*fide* B. Duncan).

NUTMEG MANNIKIN: several have been present in Homestead for "about 2 years," and on 12 May, 4 adults and 1 juvenile "still being fed" were observed, suggesting local breeding (P. W. and S. Smith).

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Webber, Dave Weeks, James Weimer, Donna Wells, Dan Wenny, Rick West, Karen Weusing, Don Whitehead, Margie Wilkinson, Walt Wilson, Glen Woolfenden, Carol Wyatt, and Wilfred Yusek.

Fall 1996 not published previously: Brown–headed Cowbird: 1700 at *Polk* phosphate mines 11 Aug (Chuck Geanangel, Pete Timmer).

Winter 1996-1997 report not published previously: Common Moorhen: 1 with all-white plumage but a normal-colored bill at Gore's Dairy, Zephyrhills (*Pasco*) 2 Jan (Don Woodard, Don Robinson, Sharon Raymond-LaPlante).

Clarification and corrections to the Winter 1996-1997 report (FFN 25:76-77): Common Loon: the report of 1 at Mashes Island (*Wakulla*) on 22 Sep should be Cape San Blas (*Gulf*); Black-bellied Whistling-Duck: reference is made to 2 sites in *Hamilton*, Occidental WMA and Bienville Plantation. However, both names refer to the same site; Bienville Plantation is the new name for Occidental WMA. (Furthermore, part of Bienville Plantation was recently renamed PSC Phosphate. From now on, this site will be called *Hamilton* phosphate mine). Black Rail: the winter report from Bienville Plantation was listed as "the first *Hamilton* report," but I had overlooked a report from that site in the Summer 1995 report (*FFN* 24:21)—BP.

Report prepared by **Bill Pranty**, state compiler (8515 Village Mill Row, Bayonet Point, Florida 34667-2662; phone 813-862-4556). Other committee members are **Linda Cooper** (115 Lameraux Road, Winter Haven, Florida 33884), **Bob Duncan** (614 Fairpoint Drive, Gulf Breeze, Florida 32561), **Gail Menk** (2725 Peachtree Drive, Tallahassee, Florida 32304), **Peggy Powell** (2965 Forest Circle, Jacksonville, Florida 32257), **Rex Rowan** (2041 NE 15th Terrace, Gainesville, Florida 32609), and **Ron Smith** (1767 Colorado Avenue NE, St. Petersburg, Florida 33703).

FLORIDA ORNITHOLOGICAL SOCIETY, INC.
TREASURER'S REPORT - 1996

Florida Field Nat. 25(4):159, 1997.

CASH IN BANKS AT YEAR-END:	1995	1996
Barnett NOW checking account	9,638.52	6,748.33
MBNA CD 6.70%, maturity 12/6/96	9,090.62	
MBNA CD 5.85%, maturity 5/22/97	10,034.37	10,638.88
MBNA CD 6.80%, maturity 12/6/97	9,099.74	9,740.11
MBNA CD 6.95%, maturity 12/6/98	9,113.43	9,769.41
MBNA CD 7.40%, maturity 12/6/99	9,154.64	9,660.52
MBNA CD 5.95%, maturity 12/6/00	9,100.94	9,857.84
MBNA CD 6.31%, maturity 12/12/01		9,728.43
MBNA Money Market account	5,292.18	13,766.45
TOTAL:	$70,524.44	$79,909.97

1996 CASH INCOME AND EXPENSES:

Total Cash as of 1/1/96: $70,524.44

Income		Expenses	
Dues	8,895.00	FFN Printing	4,829.12
Meetings	9,961.15	Meetings	8,692.24
Spec publications	1,284.70	Operating	1,159.21
Interest	4,355.06	Postage & shipping	1,149.36
Page charges	575.00	Newsletter printing	280.20
Gifts	1,520.00	Research Award	1,200.00
Miscellaneous	208.35	Sales Tax Paid	46.60
Total:	$26,204.26		$17,413.73

TOTAL CASH as of 12/31/96: $79,909.97

ANALYSIS OF CASH AS DISTRIBUTED TO FOS FUNDS:

Operating Fund	14,265.84
Special Publications Fund	16,872.83
Grants & Awards Fund	31,578.46
Endowment Fund	10,812.84
Deferred Items (See note)	6,380.00
TOTAL:	$79,909.97

Note: Dues received in 1996 for future years are considered deferred income. These figures will be incorporated into the Operating Fund income in the 1997 year-end report.

Respectfully submitted,
Linda C. Douglas, Treasurer (term expiring 4/20/97)

REVIEWERS FOR THE *FLORIDA FIELD NATURALIST*, 1997

We take this opportunity to thank those who contributed reviews during the period that Volume 25 was in preparation. Individuals who contributed two or more reviews are noted with an asterisk.

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The *Florida Field Naturalist* is a fully refereed journal emphasizing biological field studies and observations of vertebrates, especially birds, in and near Florida and the nearby West Indies. It welcomes submission of manuscripts containing new information from these areas. Please consult recent issues for style and Vol. 18, No. 1 for detailed information. Submit manuscripts for consideration to the Editor, R. Todd Engstrom. Monograph-length manuscripts may be submitted for consideration to the Editor of Special Publications, Glen E. Woolfenden. Send books and other materials for review to Associate Editor, Reed Bowman. For preliminary assistance regarding submission of manuscripts dealing with bird distribution and rarities contact Associate Editor, Bruce H. Anderson. Reports of rare birds in Florida should also be submitted to the FOS Records Committee Secretary, Bruce H. Anderson.

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